<u>Speed Limit Review - Aberdeen Crescent (Wattle Downs)</u>

The speed limit on Aberdeen Crescent, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Aberdeen Crescent connects to Scotsmoor Drive to the west and Turnberry Drive to the east. This road provides access to residential properties and is approximately 0.8 km in length.
	Aberdeen Crescent is classified as an Access road under the one network road classification (ONRC). Aberdeen Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Aberdeen Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Aberdeen Crescent has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Turnberry Drive: 50 km/h Scotsmoor Drive: 50 km/h lwinuku Crescent: 50 km/h Girvan Terrace: 50 km/h Brechin Place: 50 km/h Elie Place: 50 km/h Bellshill Close: 50 km/h Stranraer Crescent: 50 km/h Allerton Place: 50 km/h Belfry Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Aberdeen Crescent has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Aberdeen Crescent, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Adelie Place (Murrays Bay)</u>

The speed limit on Adelie Place, Murrays Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Adelie Place connects to Penguin Drive to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Adelie Place is classified as an Access road under the one network road classification (ONRC). Adelie Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Adelie Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) based on MegaMaps was determined as 150 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Adelie Place has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Penguin Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Adelie Place has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.97 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Adelie Place, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Speed Limit Review - Aden Place (Clendon Park)

The speed limit on Aden Place, Clendon Park has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Aden Place connects to Trounson Avenue to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Aden Place is classified as an Access road under the one network road classification (ONRC). Aden Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Aden Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) based on MegaMaps was determined as 250 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Aden Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Trounson Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Aden Place has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium High.
- The Infrastructure Risk Rating Score is 2.30. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Aden Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review –</u> Agar Place (Favona)

The speed limit on Agar Place, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Agar Place connects to Hall Avenue to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Agar Place is classified as an Access road under the one network road classification (ONRC). Agar Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Agar Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Narrow Lane (<3.0 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 90 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Agar Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Hall Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Agar Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.49. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Agar Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Agathis Avenue (Mairangi Bay)</u>

The speed limit on Agathis Avenue, Mairangi Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Agathis Avenue connects to Matipo Road to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Agathis Avenue is classified as a Secondary Collector road under the one network road classification (ONRC). Agathis Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Agathis Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 478 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Agathis Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Matipo Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Agathis Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Agathis Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Albert Street (Otahuhu)

The speed limit on Albert Street, between Luke Street and Princes Street, Otahuhu has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Albert Street connects to Luke Street to the north and Fairburn Road to the south. This road provides access to residential properties and is approximately 0.3 km in length.
	Albert Street is classified as a Secondary Collector road under the one network road classification (ONRC). Albert Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	One serious and one non-injury crash. This resulted in one Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Albert Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Wide shoulder (>2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2705 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Albert Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Luke Street: 50 km/h • Avalon Court: 50 km/h • Princes Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Albert Street has the following information:

- o Collective Risk band of **Low Medium**, and a Personal Risk band of **Medium High.**
- The Infrastructure Risk Rating Score is 1.94. For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Albert Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Alderson Lane (Favona)

The speed limit on Alderson Lane, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Alderson Lane connects to Tilberg Street to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Alderson Lane is classified as an Access road under the one network road classification (ONRC). Alderson Lane is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Alderson Lane were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) based on MegaMaps was determined as 250 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Alderson Lane has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Tilberg Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Alderson Lane has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium High
- The Infrastructure Risk Rating Score is 2.55. For urban areas this corresponds to an IRR band of **Medium High.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Alderson Lane, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Alford Street (Waterview)</u>

The speed limit on Alford Street, Waterview has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Alford Street connects to Great North Road to the east. This road provides access to residential properties and is approximately 0.7 km in length.
	Alford Street is classified as a Secondary Collector road under the one network road classification (ONRC). Alford Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records eight crashes between 2016 and 2020
	Eight non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Alford Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Wide Shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1916 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Alford Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Great North Road: 50 km/h • Saxon Street: 50 km/h • Middlesex Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Alford Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.81 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Alford Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Allerton Place (Wattle Downs)</u>

The speed limit on Allerton Place, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Allerton Place connects to Aberdeen Crescent to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Allerton Place is classified as an Access road under the one network road classification (ONRC). Allerton Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Allerton Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Allerton Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Aberdeen Crescent: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Allerton Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Medium.
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Allerton Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Alverston Street (Waterview)</u>

The speed limit on Alverston Street, Waterview has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Alverston Street connects to Great North Road to the east. This road provides access to residential properties and is approximately 0.7 km in length.
	Alverston Street is classified as an Access road under the one network road classification (ONRC). Alverston Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	One minor and one non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Alverston Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Wide Shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 698 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Alverston Street has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Great North Road: 50 km/h Saxon Street: 50 km/h Middlesex Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Alverston Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium.**
- The Infrastructure Risk Rating Score is 1.90 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Alverston Street, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Speed Limit Review - Aotearoa Terrace (Murrays Bay)

The speed limit on Aotearoa Terrace, Murrays Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Aotearoa Terrace connects to Saddleback Rise to the north and Rossmore Terrace to the south. This road provides access to residential properties and is approximately 0.4 km in length.
	Aotearoa Terrace is classified as an Access road under the one network road classification (ONRC). Aotearoa Terrace is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Aotearoa Terrace were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 132 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Aotearoa Terrace has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Saddleback Rise: 50 km/h • Rossmore Terrace: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Aotearoa Terrace has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Aotearoa Terrace, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Argyle Street (Morningside)</u>

The speed limit on Argyle Street, Morningside has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Argyle Street connects to Gordon Road to the west and Morningside Drive to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Argyle Street is classified as a Secondary Collector road under the one network road classification (ONRC). Argyle Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Argyle Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Commercial big box/industrial using MegaMaps tool. The IRR defines Commercial big box/industrial as "Large (big box) shops and/or industry/factories with intermittent large accessways and intersections leading to large car parking areas. Regular intersections and smaller accesses are also likely to be present. Some pedestrian and cyclist activity may be present".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 5 to <10 accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 456 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Argyle Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Gordon Road: 50 km/h Morningside Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Argyle Street has the following information:

- o Collective Risk band of **Low** and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.64 For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Argyle Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Arlington Street (Waterview)</u>

The speed limit on Arlington Street, Waterview has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Arlington Street connects to Herdman Street to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Arlington Street is classified as an Access road under the one network road classification (ONRC). Arlington Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Arlington Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and Very Narrow Shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 75 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Arlington Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Herdman Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Arlington Street has the following information:

- o Collective Risk band of **Low** and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.69 For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Arlington Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Ashbourne Place (Glendene)</u>

The speed limit on Ashbourne Place, Glendene has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Ashbourne Place connects to Barrys Road to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Ashbourne Place is classified as an Access road under the one network road classification (ONRC). Ashbourne Place is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Ashbourne Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 196 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Ashbourne Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Barrys Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Ashbourne Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Ashbourne Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Ashley Avenue (Long Bay)

The speed limit on Ashley Avenue, Long Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
	-
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Ashley Avenue connects to Glenvar Ridge Road to the north and Glenvar Road to the south. This road provides access to residential properties and is approximately 0.8 km in length.
	Ashley Avenue is classified as a Primary Collector road under the one network road classification (ONRC). Ashley Avenue is a Divided – traversable road. There are pedestrian amenities, cyclist amenities and on-street parking along this road.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020
	1 minor injury crash and 2 non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Ashley Avenue were determined using MegaMaps tool.
	 Road stereotype: Divided - traversable Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 5 to <10 accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2505 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Ashley Avenue has a mean operating speed in the range of <30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Glenvar Ridge Road: 50 km/h Karengo Street: 50 km/h Bight Road: 50 km Windlass Street: 50 km/h Cavalli Road: 50 km/h Ralph Eagles Place: 50 km/h lan Sage Avenue: 50 km/h Glenvar Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Ashley Avenue has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.24 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40 km/h as the safe and appropriate speed for Ashley Avenue, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Speed Limit Review - Ashmore Place (Favona)

The speed limit on Ashmore Place, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Ashmore Place connects to Hall Avenue to the north. This road provides access to residential properties and is approximately 0.3 km in length.
	Ashmore Place is classified as an Access road under the one network road classification (ONRC). Ashmore Place is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Ashmore Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 239 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Ashmore Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Hall Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Ashmore Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.17. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Ashmore Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Austin Brave Place (Favona)

The speed limit on Austin Brave Place, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Austin Brave Place connects to Masters Place to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Austin Brave Place is classified as an Access road under the one network road classification (ONRC). Austin Brave Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Austin Brave Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) based on MegaMaps was determined as 250 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Austin Brave Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Masters Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Austin Brave Place has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium High
- The Infrastructure Risk Rating Score is 2.55. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Austin Brave Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Avalon Court (Otahuhu)

The speed limit on Avalon Court, Otahuhu has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Avalon Court connects to Albert Street to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Avalon Court is classified as an Access road under the one network road classification (ONRC). Avalon Court is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Avalon Court were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Narrow Lane (<3.0 m) and Very Narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: <1 intersection per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 250 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Avalon Court has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Albert Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Avalon Court has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.04. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Avalon Court, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Aveline Place (Glen Innes)</u>

The speed limit on Aveline Place, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Aveline Place connects to Fenchurch Street to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Aveline Place is classified as an Access road under the one network road classification (ONRC). Aveline Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Aveline Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 100 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Aveline Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Fenchurch Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Aveline Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.69. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Aveline Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Awhina Street (Favona)

The speed limit on Awhina Street, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Awhina Street connects to Hall Avenue to the north and Curlew Place to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Awhina Street is classified as an Access road under the one network road classification (ONRC). Awhina Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Awhina Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 24 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Awhina Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Hall Avenue: 50 km/h • Curlew Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Awhina Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium**
- The Infrastructure Risk Rating Score is 2.32. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Awhina Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Barque Rise (Long Bay)

The speed limit on Barque Rise, Long Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Barque Rise connects to Turutu Place to the north and Cavalli Road to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Barque Rise is classified as an Access road under the one network road classification (ONRC). Barque Rise is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Barque Rise were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Narrow Lane (<3.0 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 50 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Barque Rise has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Turutu Place: 50 km/h • Cavalli Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Barque Rise has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 1.79 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Barque Rise, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Barrys Road (Glendene)

The speed limit on Barrys Road, Glendene has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Barrys Road connects to Hepburn Road to the north. This road provides access to residential properties and is approximately 0.8 km in length.
	Barrys Road is classified as a Secondary Collector road under the one network road classification (ONRC). Barrys Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	Two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Barrys Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 430 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Barrys Road has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Hepburn Road: 50 km/h • Glen Marine Parade: 50 km/h • Beazley Place: 50 km/h • Ashbourne Place: 50 km/h • Glendene Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Barrys Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- $\circ~$ The Infrastructure Risk Rating Score is 2.41 For urban areas this corresponds to an IRR band of $\bf Medium~High.$

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Barrys Road, the actual operating speed from the MegaMaps tool is: 30-34 km/h.

Speed Limit Review - Beazley Place (Glendene)

The speed limit on Beazley Place, Glendene has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Beazley Place connects to Barrys Road to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Beazley Place is classified as an Access road under the one network road classification (ONRC). Beazley Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Beazley Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 159 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Beazley Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are:
	Barrys Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Beazley Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Beazley Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Belfry Place (Wattle Downs)

The speed limit on Belfry Place, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Belfry Place connects to Turnberry Drive to the north. This road provides access to residential properties and is approximately 0.3 km in length.
	Belfry Place is classified as an Access road under the one network road classification (ONRC). Belfry Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Belfry Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Belfry Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Turnberry Drive: 50 km/h Blantyre Court: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Belfry Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium.**
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Belfry Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Bellbird Rise (Murrays Bay)

The speed limit on Bellbird Rise, Murrays Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Bellbird Rise connects to Penguin Drive to the north. This road provides access to residential properties and is approximately 0.3 km in length.
	Bellbird Rise is classified as an Access road under the one network road classification (ONRC). Bellbird Rise is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Bellbird Rise were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An Average daily traffic (ADT) estimate based on MegaMaps was 150 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Bellbird Rise has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Penguin Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Bellbird Rise has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.97 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Bellbird Rise, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Speed Limit Review - Bellshill Close (Wattle Downs)

The speed limit on Bellshill Close, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Bellshill Close connects to Aberdeen Crescent to the north. This road provides access to residential properties and is approximately 0.2 km in length.
	Bellshill Close is classified as an Access road under the one network road classification (ONRC). Bellshill Close is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Bellshill Close were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Bellshill Close has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Aberdeen Crescent: 50 km/h • Elie Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Bellshill Close has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium.**
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Bellshill Close, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Bight Road (Long Bay)</u>

The speed limit on Bight Road, Long Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Bight Road connects to Glenvar Ridge Road to the north and Ashley Avenue to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Bight Road is classified as an Access road under the one network road classification (ONRC). Bight Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Bight Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 50 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Bight Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Glenvar Ridge Road: 50 km/h • Ashley Avenue: 50 km/h • Killick Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Bight Road has the following information:

- $\circ\quad$ Collective Risk band of $\boldsymbol{Low},$ and a Personal Risk band of \boldsymbol{Low}
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Bight Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Bingara Place (Favona)

The speed limit on Bingara Place, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Bingara Place connects to Robertson Road to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Bingara Place is classified as an Access road under the one network road classification (ONRC). Bingara Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Bingara Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 100 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Bingara Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Robertson Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Bingara Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Bingara Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Blantyre Court (Wattle Downs)

The speed limit on Blantyre Court, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Blantyre Court connects to Belfry Place to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Blantyre Court is classified as an Access road under the one network road classification (ONRC). Blantyre Court is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Blantyre Court were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Blantyre Court has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Belfry Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Blantyre Court has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Medium.
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Blantyre Court, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Brechin Place (Wattle Downs)</u>

The speed limit on Brechin Place, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Brechin Place connects to Aberdeen Crescent to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Brechin Place is classified as an Access road under the one network road classification (ONRC). Brechin Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Brechin Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Brechin Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Aberdeen Crescent: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Brechin Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Brechin Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Brisbane Street (Grey Lynn)</u>

The speed limit on Brisbane Street, Grey Lynn has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Brisbane Street connects to Great North Road to the west and Keppell Street to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Brisbane Street is classified as an Access road under the one network road classification (ONRC). Brisbane Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Brisbane Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 104 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Brisbane Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Great North Road: 50 km/h • Dean Street: 50 km/h • Home Street: 50 km/h • Keppell Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Brisbane Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Brisbane Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Bromley Place (Glen Innes)

The speed limit on Bromley Place, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
	·
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Bromley Place connects to Paddington Street to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Bromley Place is classified as an Access road under the one network road classification (ONRC). Bromley Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Bromley Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 100 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Bromley Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Paddington Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Bromley Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Bromley Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review –</u> Burns Street (Grey Lynn)

The speed limit on Burns Street, Grey Lynn has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
	There to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Burns Street connects to Great North Road to the north and Monmouth Street to the south. This road provides access to commercial properties and is approximately 0.1 km in length.
	Burns Street is classified as a Secondary Collector road under the one network road classification (ONRC). Burns Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Burns Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Commercial Big Box/Industrial using MegaMaps tool. The IRR defines Commercial Big Box/Industrial as "Large (big box) shops and/or industry/factories with intermittent large accessways and intersections leading to large car parking areas. Regular intersections and smaller accesses are also likely to be present. Some pedestrian and cyclist activity may be present".

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 10+ intersections per km Access density: 5 to <10 accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 520 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Burns Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Great North Road: 50 km/h Putiki Street: 50 km/h Monmouth Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Burns Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.38. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Burns Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Cadman Avenue (Waterview)

The speed limit on Cadman Avenue, Waterview has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Cadman Avenue connects to Fairlands Avenue to the north. This road provides access to residential properties and is approximately 0.2 km in length.
	Cadman Avenue is classified as an Access road under the one network road classification (ONRC). Cadman Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Cadman Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Very Narrow Shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 150 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Cadman Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Fairlands Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Cadman Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Cadman Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Calthorp Close (Favona)

The speed limit on Calthorp Close, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Calthorp Close connects to Robertson Road Road to the east. This road provides access to residential properties and is approximately 0.8 km in length.
	Calthorp Close is classified as a Secondary Collector road under the one network road classification (ONRC). Calthorp Close is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Calthorp Close were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1842 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Calthorp Close has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Robertson Road: 50 km/h Chine Place: 50 km/h Curlew Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Calthorp Close has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.31. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Calthorp Close, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Caram Place (Birkdale)</u>

The speed limit on Caram Place, Birkdale has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Caram Place connects to West Glade Crescent to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Caram Place is classified as an Access road under the one network road classification (ONRC). Caram Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Caram Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 127 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Caram Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • West Glade Crescent: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Caram Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Caram Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Cassia Place (Sunnynook)

The speed limit on Cassia Place, Sunnynook has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Cassia Place connects to Juniper Road to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Cassia Place is classified as an Access road under the one network road classification (ONRC). Cassia Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Cassia Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and Very Narrow Shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 127 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Cassia Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Juniper Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Cassia Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.41 For urban areas this corresponds to an IRR band of **Medium High**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Cassia Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Cavalli Road (Long Bay)</u>

The speed limit on Cavalli Road, Long Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Cavalli Road connects to Te Oneroa Way to the east and Ashley Avenue to the west. This road provides access to residential properties and is approximately 0.3 km in length.
	Cavalli Road is classified as an Access road under the one network road classification (ONRC). Cavalli Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Cavalli Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 50 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Cavalli Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Ashley Avenue: 50 km/h • Barque Rise: 50 km/h • Pennant Street: 50 km/h • Te Oneroa Way: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Cavalli Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Cavalli Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Celia Place (Mangere East)

The speed limit on Celia Place, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Celia Place connects to Raglan Street to the north. This road provides access to residential properties and is approximately 0.7 km in length.
	Celia Place is classified as an Access road under the one network road classification (ONRC). Celia Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Celia Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 110 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Celia Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Raglan Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Celia Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.41. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Celia Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Chaplin Street (Mangere East)

The speed limit on Chaplin Street, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Chaplin Street connects to Rosella Road to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Chaplin Street is classified as an Access road under the one network road classification (ONRC). Chaplin Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Chaplin Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 130 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Chaplin Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Rosella Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Chaplin Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Chaplin Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Charles Street (Hauraki)</u>

The speed limit on Charles Street, Hauraki has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
	•
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Charles Street connects to Francis Street to the north. This road provides access to residential properties and is approximately 0.3 km in length.
	Charles Street is classified as an Access road under the one network road classification (ONRC). Charles Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Charles Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Very Narrow Shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 205 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Charles Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Walter Street: 50 km/h • Sydney Street: 50 km/h • Francis Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Charles Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.91 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Charles Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Charlotte Street (Stanmore Bay)

The speed limit on Charlotte Street, Stanmore Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Charlotte Street connects to Waiora Road to the south. This road provides access to residential properties and is approximately 0.3 km in length.
	Charlotte Street is classified as an Access road under the one network road classification (ONRC). Charlotte Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	Two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Charlotte Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 133 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Charlotte Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Waiora Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Charlotte Street has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium High
- The Infrastructure Risk Rating Score is 2.08 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Charlotte Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Cheviot Street (Mangere East)

The speed limit on Cheviot Street, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Cheviot Street connects to Buckland Road to the north and Raglan Street to the south. This road provides access to residential properties and is approximately 0.4 km in length.
	Cheviot Street is classified as a Secondary Collector road under the one network road classification (ONRC). Cheviot Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	Two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Cheviot Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1164 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Cheviot Street has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Buckland Road: 50 km/h Raglan Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Cheviot Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.30. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Cheviot Street, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

<u>Speed Limit Review - Chiltern Crescent (Glen Innes)</u>

The speed limit on Chiltern Crescent, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Chiltern Crescent connects to Elstree Avenue to the east. This road provides access to residential properties and is approximately 0.5 km in length.
	Chiltern Crescent is classified as an Access road under the one network road classification (ONRC). Chiltern Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	One minor and one non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Chiltern Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 300 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Chiltern Crescent has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Elstree Avenue: 50 km/h • Leaside Lane: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Chiltern Crescent has the following information:

- o Collective Risk band of **Low Medium**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.32. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Chiltern Crescent, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Chine Place (Favona)

The speed limit on Chine Place, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Chine Place connects to Robertson Road Road to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Chine Place is classified as an Access road under the one network road classification (ONRC). Chine Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Chine Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 130 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Chine Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Calthorp Close: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Chine Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Chine Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Chisholm Place (Mangere East)

The speed limit on Chisholm Place, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Chisholm Place connects to Hokianga Street to the north. This road provides access to residential properties and is approximately 0.2 km in length.
	Chisholm Place is classified as an Access road under the one network road classification (ONRC). Chisholm Place is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Chisholm Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 110 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Chisholm Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Hokianga Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Chisholm Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.06. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Chisholm Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Church Street (Otahuhu)

The speed limit on Church Street, between Princess Street and the northern end of Church Street, Otahuhu has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Church Street connects to Ngaio Street to the south. This road provides access to residential properties and is approximately 0.4 km in length.
	Church Street is classified as an Arterial road under the one network road classification (ONRC). Church Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	Two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Church Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Wide shoulder (>2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1127 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Church Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Luke Street: 50 km/h • Princes Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Church Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium.**
- The Infrastructure Risk Rating Score is 1.70. For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Church Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Clematis Avenue (Murrays Bay)

The speed limit on Clematis Avenue, Murrays Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Clematis Avenue connects to Rossmore Terrace to the north and Sunrise Avenue to the south. This road provides access to residential properties and is approximately 0.3 km in length.
	Clematis Avenue is classified as a Secondary Collector road under the one network road classification (ONRC). Clematis Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	One minor and one non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Clematis Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1207 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Clematis Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Rossmore Terrace: 50 km/h Aotearoa Terrace: 50 km/h Sunrise Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Clematis Avenue has the following information:

- o Collective Risk band of **Low Medium**, and a Personal Risk band of **Medium**
- The Infrastructure Risk Rating Score is 2.46 For urban areas this corresponds to an IRR band of **Medium High**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Clematis Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Coburg Street (Glendene)</u>

The speed limit on Coburg Street, Glendene has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Coburg Street connects to Garelja Road to the north. This road provides access to residential properties and is approximately 0.5 km in length.
	Coburg Street is classified as a Secondary Collector road under the one network road classification (ONRC). Coburg Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One minor injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Coburg Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 624 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Coburg Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Garelja Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Coburg Street has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium
- The Infrastructure Risk Rating Score is 2.08 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Coburg Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Colegrave Place (Glen Innes)</u>

The speed limit on Colegrave Place, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Colegrave Place connects to Farringdon Street to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Colegrave Place is classified as an Access road under the one network road classification (ONRC). Colegrave Place is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Colegrave Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 100 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Colegrave Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Farringdon Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Colegrave Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.44. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Colegrave Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Court Town Close (Mangere)

The speed limit on Court Town Close, Mangere has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Court Town Close connects to Mascot Avenue to the south. This road provides access to residential properties and is approximately 0.5 km in length.
	Court Town Close is classified as a Secondary Collector road under the one network road classification (ONRC). Court Town Close is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Court Town Close were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 426 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Court Town Close has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Mikasa Place: 50 km/h • Mascot Avenue: 50 km/h • Bader Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Court Town Close has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.17. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Court Town Close, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Courtenay Crescent (Mangere East)

The speed limit on Courtenay Crescent, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Courtenay Crescent connects to Winthrop Way to the south. This road provides access to residential properties and is approximately 0.3 km in length.
	Courtenay Crescent is classified as an Access road under the one network road classification (ONRC). Courtenay Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Courtenay Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 291 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Courtenay Crescent has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Winthrop Way: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Courtenay Crescent has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.32. For urban areas this corresponds to an IRR band of Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Courtenay Crescent, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Courtland Avenue (Glen Innes)</u>

The speed limit on Courtland Avenue, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Courtland Avenue connects to West Tamaki Road to the north and Leybourne Circle to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Courtland Avenue is classified as an Access road under the one network road classification (ONRC). Courtland Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Courtland Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 520 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Courtland Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • West Tamaki Road: 50 km/h • Leybourne Circle: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Courtland Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.60. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Courtland Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Coventry Way (Long Bay)</u>

The speed limit on Coventry Way, Long Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Coventry Way connects to Ian Sage Avenue to the west. This road provides access to residential properties and is approximately 0.2 km in length.
	Coventry Way is classified as an Access road under the one network road classification (ONRC). Coventry Way is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Coventry Way were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Narrow Lane (<3.0 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: <1 intersection per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2188 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Coventry Way has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Ian Sage Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Coventry Way has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.93 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Coventry Way, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Cramond Drive (Mangere East)

The speed limit on Cramond Drive, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Cramond Drive connects to Skipton Street to the south and Woburn Street to the north. This road provides access to residential properties and is approximately 0.4 km in length.
	Cramond Drive is classified as an Access road under the one network road classification (ONRC). Cramond Drive is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One minor injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Cramond Drive were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 665 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Cramond Drive has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Woburn Street: 50 km/h • Tomlin Place: 50 km/h • Skipton Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Cramond Drive has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium**
- The Infrastructure Risk Rating Score is 2.06. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Cramond Drive, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Creda Road (Wattle Downs)

The speed limit on Creda Road, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Creda Road connects to Manene Street to the west and Scotsmoor Drive to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Creda Road is classified as an Access road under the one network road classification (ONRC). Creda Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Creda Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Creda Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Manene Street: 50 km/h • Scotsmoor Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Creda Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium.**
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Creda Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Curlew Place (Favona)

The speed limit on Curlew Place, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Curlew Place connects to Calthorp Close to the east and Awhina Street to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Curlew Place is classified as an Access road under the one network road classification (ONRC). Curlew Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One minor injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Curlew Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 24 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Curlew Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Calthorp Close: 50 km/h Awhina Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Curlew Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium**
- The Infrastructure Risk Rating Score is 2.32. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Curlew Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Dalmahoy Place (Wattle Downs)

The speed limit on Dalmahoy Place, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Dalmahoy Place connects to Sunningdale Street to the north. This road provides access to residential properties and is approximately 0.2 km in length.
	Dalmahoy Place is classified as an Access road under the one network road classification (ONRC). Dalmahoy Place is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Dalmahoy Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Dalmahoy Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Sunningdale Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Dalmahoy Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Medium.
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Dalmahoy Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Datura Place (Sunnynook)

The speed limit on Datura Place, Sunnynook has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Datura Place connects to Sequoia Place to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Datura Place is classified as an Access road under the one network road classification (ONRC). Datura Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Datura Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Narrow Shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 127 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Datura Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Sequoia Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Datura Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.06 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Datura Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Daventry Street (Waterview)

The speed limit on Daventry Street, Waterview has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Daventry Street connects to Herdman Street to the east and Hemington Street to the west. This road provides access to residential properties and is approximately 0.5 km in length.
	Daventry Street is classified as a Secondary Collector road under the one network road classification (ONRC). Daventry Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records five crashes between 2016 and 2020
	One minor and four non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Daventry Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and Narrow Shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 520 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Daventry Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Saxon Street: 50 km/h Hemington Street: 50 km/h Herdman Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Daventry Street has the following information:

- o Collective Risk band of **Low Medium** and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.32 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Daventry Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Dawn Place (Te Atatu South)

The speed limit on Dawn Place, Te Atatu South has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Dawn Place connects to Divich Avenue to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Dawn Place is classified as an Access road under the one network road classification (ONRC). Dawn Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Dawn Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 108 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Dawn Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Divich Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Dawn Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.44 For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Dawn Place, the actual operating speed from the MegaMaps tool is: 30-34 km/h.

<u>Speed Limit Review - Dean Street (Grey Lynn)</u>

The speed limit on Dean Street, Grey Lynn has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Dean Street connects to Kirk Street to the north. This road provides access to residential properties and is approximately 0.4 km in length.
	Dean Street is classified as an Access road under the one network road classification (ONRC). Dean Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020
	Three non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Dean Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 104 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Dean Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Kirk Street: 50 km/h • Brisbane Street: 50 km/h • Potatau Street: 50 km/h • King Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Dean Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Dean Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Delemere Place (Glen Innes)</u>

The speed limit on Delemere Place, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance an	•
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Delemere Place connects to Epping Street to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Delemere Place is classified as an Access road under the one network road classification (ONRC). Delemere Place is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Delemere Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 416 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Delemere Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Epping Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Delemere Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Delemere Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Dillimore Avenue (Pakuranga)</u>

The speed limit on Dillimore Avenue, Pakuranga has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Dillimore Avenue connects to Millen Avenue to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Dillimore Avenue is classified as an Access road under the one network road classification (ONRC). Dillimore Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Dillimore Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 80 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Dillimore Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Millen Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Dillimore Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.44 For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Dillimore Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Disley Road (Wattle Downs)

The speed limit on Disley Road, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Disley Road connects to Manene Street to the west and Strathaven Road to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Disley Road is classified as an Access road under the one network road classification (ONRC). Disley Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Disley Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Disley Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Manene Street: 50 km/h • Strathaven Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Disley Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium.**
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Disley Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Divich Avenue (Te Atatu South)

The speed limit on Divich Avenue, Te Atatu South has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Divich Avenue connects to Meadow Crescent to the east and Te Atatu Road to the west. This road provides access to residential properties and is approximately 0.7 km in length.
	Divich Avenue is classified as a Primary Collector road under the one network road classification (ONRC). Divich Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Divich Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 4904 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Divich Avenue has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Te Atatu Road: 50 km/h Dawn Place: 50 km/h Finlow Drive: 50 km/h Metric Place: 50 km/h Tirimoana Road: 50 km/h Meadow Crescent: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Divich Avenue has the following information:

- $\circ\quad$ Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.55 For urban areas this corresponds to an IRR band of **Medium High**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Divich Avenue, the actual operating speed from the MegaMaps tool is: 30-34 km/h.

<u>Speed Limit Review – Donnell Avenue (Favona)</u>

The speed limit on Donnell Avenue, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Donnell Avenue connects to Walmsley Road to the north and Hall Avenue to the south. This road provides access to residential properties and is approximately 0.5 km in length.
	Donnell Avenue is classified as an Access road under the one network road classification (ONRC). Donnell Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records four crashes between 2016 and 2020
	One minor and three non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Donnell Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1929 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Donnell Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Walmsley Road: 60 km/h • Fatafehi Place: 50 km/h • Masters Place: 50 km/h • Harriet Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Donnell Avenue has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium High
- The Infrastructure Risk Rating Score is 2.55. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Donnell Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Dorendia Place (Clendon Park)

The speed limit on Dorendia Place, Clendon Park has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Dorendia Place connects to Frobisher Way to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Dorendia Place is classified as an Access road under the one network road classification (ONRC). Dorendia Place is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Dorendia Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) based on MegaMaps was determined as 250 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Dorendia Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Frobisher Way: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Dorendia Place has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium High.
- The Infrastructure Risk Rating Score is 2.30. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Dorendia Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Elie Place (Wattle Downs)</u>

The speed limit on Elie Place, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Elie Place connects to Aberdeen Crescent to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Elie Place is classified as an Access road under the one network road classification (ONRC). Elie Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Elie Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Elie Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Aberdeen Crescent: 50 km/h • Bellshill Close: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Elie Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium.**
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Elie Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Elliston Crescent (Stanmore Bay)

The speed limit on Elliston Crescent, Stanmore Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Elliston Crescent connects to Waiora Road to the north. This road provides access to residential properties and is approximately 0.7 km in length.
	Elliston Crescent is classified as a Secondary Collector road under the one network road classification (ONRC). Elliston Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Elliston Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 200 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Elliston Crescent has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Waiora Road: 50 km/h • Gledstane Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Elliston Crescent has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.08 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Elliston Crescent, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Epping Street (Glen Innes)</u>

The speed limit on Epping Street, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Epping Street connects to Farringdon Street to the north and Heatherbank Street to the east. This road provides access to residential properties and is approximately 0.5 km in length.
	Epping Street is classified as an Access road under the one network road classification (ONRC). Epping Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Epping Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 416 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Epping Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Farringdon Street: 50 km/h • Delemere Place: 50 km/h • Harlow Crescent: 50 km/h • Heatherbank Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Epping Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Epping Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Erica Road (Sunnynook)

The speed limit on Erica Road, Sunnynook has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Erica Road connects to Juniper Road to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Erica Road is classified as an Access road under the one network road classification (ONRC). Erica Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Erica Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and Narrow Shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 127 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Erica Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Juniper Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Erica Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.60 For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Erica Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review –</u> Ev Perry Way (Glen Innes)

The speed limit on Ev Perry Way, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Ev Perry Way connects to Linthorpe Crescent to the north and Ev Perry Way to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Ev Perry Way is classified as an Access road under the one network road classification (ONRC). Ev Perry Way is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in one Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Ev Perry Way are estimates determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) was determined from MegaMaps as 150 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Ev Perry Way has an estimated mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Leybourne Circle: 50 km/h • Raamuri Road: 50 km/h • Elstree Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

Ev Perry Way has the following information based on estimates from MegaMaps:

- o Collective Risk band of **Low Medium**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.60. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Ev Perry Way, the estimated operating speed based on the MegaMaps tool is: <30 km/h.

Speed Limit Review - Evandale Street (Glen Innes)

The speed limit on Evandale Street, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Evandale Street connects to Farringdon Street to the east and Heatherbank Street to the west. This road provides access to residential properties and is approximately 0.4 km in length.
	Evandale Street is classified as a Secondary Collector road under the one network road classification (ONRC). Evandale Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Evandale Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 520 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Evandale Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Farringdon Street: 50 km/h • Huxley Place: 50 km/h • Heatherbank Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Evandale Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Evandale Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Fairlands Avenue (Waterview)

The speed limit on Fairlands Avenue, Waterview has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Fairlands Avenue connects to Seaside Avenue to the west and Great North Road to the east. This road provides access to residential properties and is approximately 0.5 km in length.
	Fairlands Avenue is classified as a Secondary Collector road under the one network road classification (ONRC). Fairlands Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Fairlands Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Narrow Shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1040 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Fairlands Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Seaside Avenue: 50 km/h • Hadfield Avenue: 50 km/h • Great North Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Fairlands Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.21 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Fairlands Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Farringdon Street (Glen Innes)</u>

The speed limit on Farringdon Street, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Farringdon Street connects to Line Road to the west and Taniwha Street to the south. This road provides access to residential properties and is approximately 0.9 km in length.
	Farringdon Street is classified as a Secondary Collector road under the one network road classification (ONRC). Farringdon Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records six crashes between 2016 and 2020
	Two minor and four non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Farringdon Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1115 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Farringdon Street has a mean operating speed in the range of 30-34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Line Road: 50 km/h • Greenway Place: 50 km/h • Epping Street: 50 km/h • Heatherbank Street: 50 km/h • Paddington Street: 50 km/h • Evandale Street: 50 km/h • Colegrave Place: 50 km/h • Wimbledon Crescent: 50 km/h • Taniwha Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Farringdon Street has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of High.
- The Infrastructure Risk Rating Score is 2.33. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Farringdon Street, the actual operating speed from the MegaMaps tool is: 30-34 km/h.

Speed Limit Review - Fatafehi Place (Favona)

The speed limit on Fatafehi Place, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Fatafehi Place connects to Donnell Avenue to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Fatafehi Place is classified as an Access road under the one network road classification (ONRC). Fatafehi Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Fatafehi Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) based on MegaMaps was determined as 250 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Fatafehi Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Donnell Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Fatafehi Place has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium High
- The Infrastructure Risk Rating Score is 2.55. For urban areas this corresponds to an IRR band of **Medium High.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Fatafehi Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review –</u> Fenchurch Street (Glen Innes)

The speed limit on Fenchurch Street, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Fenchurch Street connects to Leybourne Circle to the north and Taniwha Street to the south. This road provides access to residential properties and is approximately 0.4 km in length.
	Fenchurch Street is classified as a Secondary Collector road under the one network road classification (ONRC). Fenchurch Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020
	Three non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Fenchurch Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1144 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Fenchurch Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Leybourne Circle: 50 km/h Aveline Place: 50 km/h Sunnymead Road: 50 km/h Taniwha Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Fenchurch Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.33. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Fenchurch Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Finlow Drive (Te Atatu South)

The speed limit on Finlow Drive, Te Atatu South has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Finlow Drive connects to McLeod Road to the north and Divich Avenue to the south. This road provides access to residential properties and is approximately 0.3 km in length.
	Finlow Drive is classified as a Secondary Collector road under the one network road classification (ONRC). Finlow Drive is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Finlow Drive were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1348 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Finlow Drive has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • McLeod Road: 50 km/h • Divich Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Finlow Drive has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.30 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Finlow Drive, the actual operating speed from the MegaMaps tool is: 30-34 km/h.

<u>Speed Limit Review – Fir Street (Waterview)</u>

The speed limit on Fir Street, Waterview has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Fir Street connects to Great North Road to the east. This road provides access to residential properties and is approximately 0.6 km in length.
	Fir Street is classified as a Secondary Collector road under the one network road classification (ONRC). Fir Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	Two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Fir Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Wide Shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 688 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Fir Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Great North Road: 50 km/h • Tutuki Street: 50 km/h • Hadfield Avenue: 50 km/h • Middlesex Road: 50 km/h • Seaside Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Fir Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.90 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Fir Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Frobisher Way (Clendon Park)

The speed limit on Frobisher Way, Clendon Park has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Frobisher Way connects to Moncrieff Avenue to the north and Burundi Avenue to the south. This road provides access to residential properties and is approximately 0.4 km in length.
	Frobisher Way is classified as an Access road under the one network road classification (ONRC). Frobisher Way is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records four crashes between 2016 and 2020
	Four non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Frobisher Way were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1079 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Frobisher Way has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Moncrieff Avenue: 50 km/h • Dorendia Place: 50 km/h • Glennis Place: 50 km/h • Burundi Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Frobisher Way has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium High.
- The Infrastructure Risk Rating Score is 2.30. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Frobisher Way, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Galaxy Drive (Mairangi Bay)

The speed limit on Galaxy Drive, Mairangi Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Galaxy Drive connects to Matipo Road to the east and East Coast Road to the south. This road provides access to residential properties and is approximately 0.6 km in length.
	Galaxy Drive is classified as an Access road under the one network road classification (ONRC). Galaxy Drive is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Galaxy Drive were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 280 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Galaxy Drive has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Matipo Road: 50 km/h • East Coast Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Galaxy Drive has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 1.92 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Galaxy Drive, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Speed Limit Review - Garelja Road (Glendene)

The speed limit on Garelja Road, Glendene has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero
	Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Garelja Road connects to Henderson Valley Road to the south. This road provides access to residential properties and is approximately 0.5 km in length.
	Garelja Road is classified as an Access road under the one network road classification (ONRC). Garelja Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	One minor injury crash and two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Garelja Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and very wide shoulder (>2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1644 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Garelja Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Henderson Valley Road: 50 km/h • Coburg Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Garelja Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.22 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Garelja Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Girvan Terrace (Wattle Downs)

The speed limit on Girvan Terrace, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Girvan Terrace connects to Aberdeen Crescent to the north. This road provides access to residential properties and is approximately 0.2 km in length.
	Girvan Terrace is classified as an Access road under the one network road classification (ONRC). Girvan Terrace is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Girvan Terrace were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Girvan Terrace has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Aberdeen Crescent: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Girvan Terrace has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Medium.
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Girvan Terrace, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Gledstane Road (Stanmore Bay)

The speed limit on Gledstane Road, between Elliston Crescent and D'Oyly Drive, Stanmore Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Gledstane Road connects to D'oyly Drive to the west and Elliston Crescent to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Gledstane Road is classified as a Secondary Collector road under the one network road classification (ONRC). Gledstane Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Gledstane Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Narrow Lane (<3.0 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 684 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Gledstane Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Elliston Crescent: 50 km/h • D'oyly Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Gledstane Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.49 For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Gledstane Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review -</u> Glen Marine Parade (Glendene)

The speed limit on Glen Marine Parade, Glendene has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Glen Marine Parade connects to Barrys Road to the south. This road provides access to residential properties and is approximately 0.7 km in length.
	Glen Marine Parade is classified as an Access road under the one network road classification (ONRC). Glen Marine Parade is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Glen Marine Parade were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 492 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Glen Marine Parade has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Barrys Road: 50 km/h Hepburn Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Glen Marine Parade has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.17 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Glen Marine Parade, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review -</u> Glennis Place (Clendon Park)

The speed limit on Glennis Place, Clendon Park has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Glennis Place connects to Frobisher Way to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Glennis Place is classified as an Access road under the one network road classification (ONRC). Glennis Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Glennis Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) based on MegaMaps was determined as 250 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Glennis Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Frobisher Way: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Glennis Place has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium High.
- The Infrastructure Risk Rating Score is 2.30. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Glennis Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Glenvar Ridge Road (Long Bay)

The speed limit on Glenvar Ridge Road, between Te Oneroa Way and Bight Road, Long Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Glenvar Ridge Road connects to Bounty Road to the east and Ashley Avenue to the west. This road provides access to residential properties and is approximately 0.6 km in length.
	Glenvar Ridge Road is classified as an Access road under the one network road classification (ONRC). Glenvar Ridge Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Glenvar Ridge Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 50 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Glenvar Ridge Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Bounty Road: 50 km/h • Ashley Avenue: 50 km/h • Pennant Street: 50 km/h • Timu Road: 50 km/h • Bight Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Glenvar Ridge Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Glenvar Ridge Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review -</u> Gordon Road (Mount Albert)

The speed limit on Gordon Road, Mount Albert has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
	Relet to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Gordon Road connects to Argyle Street to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Gordon Road is classified as an Access road under the one network road classification (ONRC). Gordon Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Gordon Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Commercial big box/industrial using MegaMaps tool. The IRR defines Commercial big box/industrial as "Large (big box) shops and/or industry/factories with intermittent large accessways and intersections leading to large car parking areas. Regular intersections and smaller accesses are also likely to be present. Some pedestrian and cyclist activity may be present".

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 5 to <10 accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 104 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Gordon Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Argyle Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Gordon Road has the following information:

- Collective Risk band of Low and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.44 For urban areas this corresponds to an IRR band of **Medium High**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Gordon Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review -</u> Greenway Place (Glen Innes)

The speed limit on Greenway Place, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Greenway Place connects to Farringdon Street to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Greenway Place is classified as an Access road under the one network road classification (ONRC). Greenway Place is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Greenway Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 75 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Greenway Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Farringdon Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Greenway Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.69. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Greenway Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Greta Place (Stanmore Bay)

The speed limit on Greta Place, Stanmore Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Greta Place connects to Waiora Road to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Greta Place is classified as an Access road under the one network road classification (ONRC). Greta Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Greta Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 48 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Greta Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Waiora Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Greta Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.32 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Greta Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review -</u> Guildford Place (Glen Innes)

The speed limit on Guildford Place, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Guildford Place connects to Leybourne Circle to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Guildford Place is classified as an Access road under the one network road classification (ONRC). Guildford Place is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Guildford Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 200 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Guildford Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Leybourne Circle: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Guildford Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.41. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Guildford Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Haddon Street (Mangere East)

The speed limit on Haddon Street, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Haddon Street connects to Skipton Street to the south and Raglan Street to the north. This road provides access to residential properties and is approximately 0.4 km in length.
	Haddon Street is classified as a Secondary Collector road under the one network road classification (ONRC). Haddon Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records four crashes between 2016 and 2020
	Four non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Haddon Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1258 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Haddon Street has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Raglan Street: 50 km/h Skipton Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Haddon Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.06. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Haddon Street, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Speed Limit Review - Hadfield Avenue (Waterview)

The speed limit on Hadfield Avenue, Waterview has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Hadfield Avenue connects to Fir Street to the north and Fairlands Avenue to the south. This road provides access to residential properties and is approximately 0.3 km in length.
	Hadfield Avenue is classified as an Access road under the one network road classification (ONRC). Hadfield Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One minor injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Hadfield Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Wide Shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 208 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Hadfield Avenue has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Fairlands Avenue: 50 km/h • Fir Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Hadfield Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.90 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Hadfield Avenue, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Speed Limit Review - Hadley Wood Drive (Wattle Downs)

The speed limit on Hadley Wood Drive, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Hadley Wood Drive connects to Manene Street to the west and Carnoustie Drive to the east. This road provides access to residential properties and is approximately 0.6 km in length.
	Hadley Wood Drive is classified as an Access road under the one network road classification (ONRC). Hadley Wood Drive is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Hadley Wood Drive were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Hadley Wood Drive has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Manene Street: 50 km/h • Strathaven Road: 50 km/h • Scotsmoor Drive: 50 km/h • Carnoustie Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Hadley Wood Drive has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Hadley Wood Drive, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Hall Avenue (Favona)

The speed limit on Hall Avenue, between the eastern side of State Highway 20 and Robertson Road, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Hall Avenue connects to Robertson Road to the east and Walmsley Road to the north. This road provides access to residential properties and is approximately 0.6 km in length.
	Hall Avenue is classified as a Secondary Collector road under the one network road classification (ONRC). Hall Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records seven crashes between 2016 and 2020
	Seven non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Hall Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 916 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Hall Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Ashmore Place: 50 km/h • Donnell Avenue: 50 km/h • Awhina Street: 50 km/h • Pate Crescent: 50 km/h • Agar Place: 50 km/h • Robertson Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Hall Avenue has the following information:

- $\circ\quad$ Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.18. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Hall Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Harlow Crescent (Glen Innes)

The speed limit on Harlow Crescent, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Harlow Crescent connects to Epping Street to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Harlow Crescent is classified as an Access road under the one network road classification (ONRC). Harlow Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Harlow Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 416 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Harlow Crescent has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Epping Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Harlow Crescent has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Harlow Crescent, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

Speed Limit Review - Harriet Street (Favona)

The speed limit on Harriet Street, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Harriet Street connects to Donnell Avenue to the west and Tilberg Street to the north. This road provides access to residential properties and is approximately 0.3 km in length.
	Harriet Street is classified as an Access road under the one network road classification (ONRC). Harriet Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records four crashes between 2016 and 2020
	One serious, one minor and two non-injury crashes. This resulted in one Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Harriet Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1929 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Harriet Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Donnell Avenue: 50 km/h Tilberg Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Harriet Street has the following information:

- o Collective Risk band of **Low Medium**, and a Personal Risk band of **Medium High**
- The Infrastructure Risk Rating Score is 2.55. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Harriet Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

Speed Limit Review - Haverstock Road (Sandringham)

The speed limit on Haverstock Road, between Euston Road and Fowlds Avenue, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Haverstock Road connects to Hazelmere Road to the north and Sandringham Road to the east. This road provides access to residential properties and is approximately 0.6 km in length.
	Haverstock Road is classified as a Secondary Collector road under the one network road classification (ONRC). Haverstock Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020 Three non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and
	therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Haverstock Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and Narrow Shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1040 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Haverstock Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Hazelmere Road: 50 km/h • Kerr Street: 50 km/h • Pickett Avenue: 50 km/h • Euston Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Haverstock Road has the following information:

- o Collective Risk band of Low and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.46 For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Haverstock Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore, we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

Speed Limit Review - Hazelmere Road (Sandringham)

The speed limit on Hazelmere Road, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Hazelmere Road connects to Haverstock Road to the west and Fowlds Avenue to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Hazelmere Road is classified as an Access road under the one network road classification (ONRC). Hazelmere Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	One minor and one non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Hazelmere Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 745 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Hazelmere Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Haverstock Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Hazelmere Road has the following information:

- Collective Risk band of Low and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Hazelmere Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore, we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

Speed Limit Review - Heather Place (Sunnynook)

The speed limit on Heather Place, Sunnynook has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Heather Place connects to Tonkin Drive to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Heather Place is classified as an Access road under the one network road classification (ONRC). Heather Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Heather Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 127 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Heather Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Tonkin Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Heather Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.44 For urban areas this corresponds to an IRR band of **Medium High**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Heather Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore, we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

<u>Speed Limit Review - Heatherbank Street (Glen Innes)</u>

The speed limit on Heatherbank Street, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero
	Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Heatherbank Street connects to Farringdon Street to the north and Taniwha Street to the south. This road provides access to residential properties and is approximately 0.5 km in length.
	Heatherbank Street is classified as a Secondary Collector road under the one network road classification (ONRC). Heatherbank Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One minor injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Heatherbank Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 846 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Heatherbank Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Farringdon Street: 50 km/h • Epping Street: 50 km/h • Evandale Street: 50 km/h • Taniwha Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Heatherbank Street has the following information:

- o Collective Risk band of **Low Medium**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.06. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Heatherbank Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

Speed Limit Review - Hemington Street (Waterview)

The speed limit on Hemington Street, Waterview has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Hemington Street connects to Herdman Street to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Hemington Street is classified as an Access road under the one network road classification (ONRC). Hemington Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Hemington Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and Very Narrow Shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 150 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Hemington Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Herdman Street: 50 km/h • Daventry Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Hemington Street has the following information:

- o Collective Risk band of **Low** and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.69 For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Hemington Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore, we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

<u>Speed Limit Review - Henslowe Place (Glen Innes)</u>

The speed limit on Henslowe Place, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Henslowe Place connects to Weybridge Crescent to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Henslowe Place is classified as an Access road under the one network road classification (ONRC). Henslowe Place is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Henslowe Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 416 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Henslowe Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Weybridge Crescent: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Henslowe Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.90. For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Henslowe Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

Speed Limit Review - Hepburn Road (Glendene)

The speed limit on Hepburn Road, between Glen Marine Parade and the Barrys Road/Hepburn Road intersection, Glendene has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Hepburn Road connects to Barrys Road to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Hepburn Road is classified as an Access road under the one network road classification (ONRC). Hepburn Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020 This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Hepburn Road were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Curved • Carriageway width: Medium lane (3.0 to 3.5 m) and wide shoulder (1.0 m to <2.0 m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was based on an estimate from MegaMaps as 1000 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Hepburn Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Barrys Road: 50 km/h Glen Marine Parade: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Hepburn Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.33 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Hepburn Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

<u>Speed Limit Review – Herbert Street (Hauraki)</u>

The speed limit on Herbert Street, Hauraki has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Herbert Street connects to Walter Street to the north. This road provides access to residential properties and is approximately 0.2 km in length.
	Herbert Street is classified as an Access road under the one network road classification (ONRC). Herbert Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Herbert Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Very Narrow Shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 205 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Herbert Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Walter Street: 50 km/h • Pine Ridge Terrace: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Herbert Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.91 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Herbert Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore, we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

Speed Limit Review – Herdman Street (Waterview)

The speed limit on Herdman Street, Waterview has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Herdman Street connects to Great North Road to the east and Hemington Street to the west. This road provides access to residential properties and is approximately 0.6 km in length.
	Herdman Street is classified as a Secondary Collector road under the one network road classification (ONRC). Herdman Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	Two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Herdman Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and Narrow Shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1560 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Herdman Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Great North Road: 50 km/h • Daventry Street: 50 km/h • Waterbank Crescent: 50 km/h • Arlington Street: 50 km/h • Hemington Street: 50 km/h • Daventry Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Herdman Street has the following information:

- o Collective Risk band of **Low** and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.46 For urban areas this corresponds to an IRR band of **Medium High**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Herdman Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore, we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

Speed Limit Review - Hokianga Street (Mangere East)

The speed limit on Hokianga Street, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Hokianga Street connects to Raglan Street to the south and Portage Road to the east. This road provides access to residential properties and is approximately 0.7 km in length.
	Hokianga Street is classified as a Secondary Collector road under the one network road classification (ONRC). Hokianga Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records four crashes between 2016 and 2020
	Four non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Hokianga Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1300 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Hokianga Street has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Raglan Street: 50 km/h Chisholm Place: 50 km/h Portage Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Hokianga Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.30. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Hokianga Street, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Therefore we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

<u>Speed Limit Review - Home Street (Grey Lynn)</u>

The speed limit on Home Street, between 30m west of King Street and Kirk Street, Grey Lynn has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Home Street connects to Kirk Street to the north and Bond Street to the south. This road provides access to residential properties and is approximately 0.3 km in length.
	Home Street is classified as an Access road under the one network road classification (ONRC). Home Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Home Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 104 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Home Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Kirk Street: 50 km/h • Brisbane Street: 50 km/h • Potatau Street: 50 km/h • King Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Home Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Home Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Howlett Street (Waterview)</u>

The speed limit on Howlett Street, Waterview has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Howlett Street connects to Oakley Avenue to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Howlett Street is classified as an Access road under the one network road classification (ONRC). Howlett Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Howlett Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Narrow Shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 200 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Howlett Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Oakley Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Howlett Street has the following information:

- o Collective Risk band of Low and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.06 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Howlett Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Hutton Street (Otahuhu)

The speed limit on Hutton Street, between Luke Street and Princes Street, Otahuhu has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Hutton Street connects to Luke Street to the north and Fairburn Road to the south. This road provides access to residential properties and is approximately 0.3 km in length.
	Hutton Street is classified as a Secondary Collector road under the one network road classification (ONRC). Hutton Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Hutton Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Wide shoulder (>2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1081 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Hutton Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Luke Street: 50 km/h • Princes Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Hutton Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.70. For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Hutton Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Huxley Place (Glen Innes)</u>

The speed limit on Huxley Place, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Huxley Place connects to Evandale Street to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Huxley Place is classified as an Access road under the one network road classification (ONRC). Huxley Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Huxley Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 75 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Huxley Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Evandale Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Huxley Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.44. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Huxley Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Ian Sage Avenue (Long Bay)</u>

The speed limit on Ian Sage Avenue, Long Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	lan Sage Avenue connects to lan Sage Avenue to the west. This road provides access to residential properties and is approximately 0.3 km in length.
	Ian Sage Avenue is classified as an Access road under the one network road classification (ONRC). Ian Sage Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Ian Sage Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 – 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersection per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2188 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Ian Sage Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Ashley Avenue: 50 km/h • Coventry Way: 50 km/h • Kura Place: 50 km/h • Glenvar Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Ian Sage Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.81 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for lan Sage Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Iris Place (Clendon Park)

The speed limit on Iris Place, Clendon Park has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Iris Place connects to Moncrieff Avenue to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Iris Place is classified as an Access road under the one network road classification (ONRC). Iris Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Iris Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) based on MegaMaps was determined as 250 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Iris Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Moncrieff Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Iris Place has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium High.
- The Infrastructure Risk Rating Score is 2.30. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Iris Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Iwinuku Crescent (Wattle Downs)

The speed limit on Iwinuku Crescent, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Iwinuku Crescent connects to Turnberry Drive to the south and Aberdeen Crescent to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Iwinuku Crescent is classified as an Access road under the one network road classification (ONRC). Iwinuku Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Iwinuku Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Iwinuku Crescent has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Turnberry Drive: 50 km/h Aberdeen Crescent: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Iwinuku Crescent has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium.**
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Iwinuku Crescent, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - James Scott Place (Te Atatu South)

The speed limit on James Scott Place, Te Atatu South has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	James Scott Place connects to Tracey Terrace to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	James Scott Place is classified as an Access road under the one network road classification (ONRC). James Scott Place is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for James Scott Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) estimate based on MegaMaps as 150 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of James Scott Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Tracey Terrace: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps James Scott Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.81 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for James Scott Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Jellicoe Road (Murrays Bay)

The speed limit on Jellicoe Road, Murrays Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Jellicoe Road connects to Lyons Avenue to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Jellicoe Road is classified as an Access road under the one network road classification (ONRC). Jellicoe Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Jellicoe Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 2 to <3 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 127 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Jellicoe Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Lyons Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Jellicoe Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.09 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Jellicoe Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review –</u> Jonathan Place (Sunnynook)

The speed limit on Jonathan Place, Sunnynook has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Jonathan Place connects to Tonkin Drive to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Jonathan Place is classified as an Access road under the one network road classification (ONRC). Jonathan Place is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Jonathan Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 127 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Jonathan Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Tonkin Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Jonathan Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Jonathan Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Juniper Road (Sunnynook)</u>

The speed limit on Juniper Road, Sunnynook has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Juniper Road connects to Sunset Road to the north and Sycamore Drive to the south. This road provides access to residential properties and is approximately 0.8 km in length.
	Juniper Road is classified as a Secondary Collector road under the one network road classification (ONRC). Juniper Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records four crashes between 2016 and 2020
	One minor and three non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Juniper Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2186 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Juniper Road has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Sunset Road: 50 km/h Cassia Place: 50 km/h Erica Road: 50 km/h Tonkin Drive: 50 km/h Sequoia Place: 50 km/h Sycamore Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Juniper Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium.**
- The Infrastructure Risk Rating Score is 2.05 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Juniper Road, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Speed Limit Review - Jutland Road (Hauraki)

The speed limit on Jutland Road, from its southern end to 30 m south of Francis Street, Hauraki has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero
	Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Jutland Road connects to Lake Road to the north. This section of Jutland Road provides access to residential properties and is approximately 0.3 km in length.
	Jutland Road is classified as a Secondary Collector road south of Waitemata Road and an Arterial road north of Waitemata Road under the one network road classification (ONRC). Jutland Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Jutland Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Wide Shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2731 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Jutland Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Pine Ridge Terrace: 50 km/h • Walter Street: 50 km/h • Waitemata Road: 50 km/h • Sydney Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Jutland Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.33. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Jutland Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Kairanga Street (Mangere East)

The speed limit on Kairanga Street, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Kairanga Street connects to Raglan Street to the west and Raglan Street to the south. This road provides access to residential properties and is approximately 0.5 km in length.
	Kairanga Street is classified as an Access road under the one network road classification (ONRC). Kairanga Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Kairanga Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 582 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Kairanga Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Raglan Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kairanga Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.91. For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Kairanga Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Kanuka Street (Point Chevalier)

The speed limit on Kanuka Street, Point Chevalier has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Kanuka Street connects to Moa Road to the west and Premier Avenue to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Kanuka Street is classified as an Access road under the one network road classification (ONRC). Kanuka Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Kanuka Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Very Wide shoulder (>2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 312 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Kanuka Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Moa Road: 50 km/h • Riro Street: 50 km/h • Premier Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kanuka Street has the following information:

- o Collective Risk band of **Low** and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.08 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Kanuka Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Karengo Street (Long Bay)</u>

The speed limit on Karengo Street, Long Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Karengo Street connects to Pennant Street to the east and Ashley Avenue to the west. This road provides access to residential properties and is approximately 0.2 km in length.
	Karengo Street is classified as an Access road under the one network road classification (ONRC). Karengo Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Karengo Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 50 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Karengo Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Timu Road: 50 km/h Ashley Avenue: 50 km/h Penant Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Karengo Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Karengo Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Kerr Street (Sandringham)

The speed limit on Kerr Street, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Kerr Street connects to Hazelmere Road south. This road provides access to residential properties and is approximately 0.1 km in length.
	Kerr Street is classified as an Access road under the one network road classification (ONRC). Kerr Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Kerr Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Very Wide shoulder (>2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 104 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Kerr Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Hazelmere Road: 50 km/h • Haverstock Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kerr Street has the following information:

- o Collective Risk band of **Low** and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.08 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Kerr Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Kerria Place (Sunnynook)</u>

The speed limit on Kerria Place, Sunnynook has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Kerria Place connects to Sequoia Place to the west. This road provides access to residential properties and is approximately 0.2 km in length.
	Kerria Place is classified as an Access road under the one network road classification (ONRC). Kerria Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Kerria Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Narrow Shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 127 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Kerria Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Sequoia Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kerria Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.06 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Kerria Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Kettle Street (Point Chevalier)</u>

The speed limit on Kettle Street, Point Chevalier has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Kettle Street connects to Premier Avenue to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Kettle Street is classified as an Access road under the one network road classification (ONRC). Kettle Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Kettle Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 75 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Kettle Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Premier Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kettle Street has the following information:

- o Collective Risk band of **Low** and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.44 For urban areas this corresponds to an IRR band of **Medium High**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Kettle Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Killick Place (Long Bay)</u>

The speed limit on Killick Place, Long Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Killick Place connects to Bight Road to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Killick Place is classified as an Access road under the one network road classification (ONRC). Killick Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Killick Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 50 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Killick Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Bight Road: 50 km

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Killick Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Killick Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - King Street (Grey Lynn)</u>

The speed limit on King Street, Grey Lynn has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	King Street connects to Great North Road to the north and Niger Street to the south. This road provides access to residential properties and is approximately 0.3 km in length.
	King Street is classified as a Secondary Collector road under the one network road classification (ONRC). King Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for King Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Wide shoulder (>2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 977 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of King Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Great North Road: 50 km/h • Dean Street: 50 km/h • Home Street: 50 km/h • Niger Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps King Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for King Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Kirk Street (Grey Lynn)</u>

The speed limit on Kirk Street, Grey Lynn has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Kirk Street connects to Great North Road to the north and Keppell Street to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Kirk Street is classified as an Access road under the one network road classification (ONRC). Kirk Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Kirk Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 104 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Kirk Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Great North Road: 50 km/h • Dean Street: 50 km/h • Monmouth Street: 50 km/h • Home Street: 50 km/h • Partridge Street: 50 km/h • Keppell Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kirk Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Kirk Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Kirkaldy Street (Wattle Downs)

The speed limit on Kirkaldy Street, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Kirkaldy Street connects to Manene Street to the west and Scotsmoor Drive to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Kirkaldy Street is classified as an Access road under the one network road classification (ONRC). Kirkaldy Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Kirkaldy Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Kirkaldy Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Manene Street: 50 km/h • Strathaven Road: 50 km/h • Scotsmoor Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kirkaldy Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium.**
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Kirkaldy Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Kokiri Street (Te Atatu South)

The speed limit on Kokiri Street, Te Atatu South has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Kokiri Street connects to Te Atatu Road to the west and Nui Mana Place to the east. This road provides access to residential properties and is approximately 0.4 km in length.
	Kokiri Street is classified as a Secondary Collector road under the one network road classification (ONRC). Kokiri Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020.
	Two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Kokiri Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 2 to <3 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 559 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Kokiri Street has a mean operating speed in the range of 30 – 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Te Atatu Road: 50 km/h Nui Mana Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kokiri Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 1.58 For urban areas this corresponds to an IRR band of Low.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Kokiri Street, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Speed Limit Review – Kura Place (Long Bay)

The speed limit on Kura Place, Long Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Kura Place connects to Ian Sage Avenue to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Kura Place is classified as an Access road under the one network road classification (ONRC). Kura Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Kura Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Narrow Lane (<3.0 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: <1 intersection per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2188 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Kura Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • lan Sage Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kura Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.93 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Kura Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Lanark Place (Glen Innes)</u>

The speed limit on Lanark Place, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Lanark Place connects to Sloane Street to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Lanark Place is classified as an Access road under the one network road classification (ONRC). Lanark Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Lanark Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 520 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Lanark Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Sloane Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Lanark Place has the following information:

- o Collective Risk band of **Low Medium**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Lanark Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Leaside Lane (Glen Innes)

The speed limit on Leaside Lane, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Leaside Lane connects to Chiltern Crescent to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Leaside Lane is classified as an Access road under the one network road classification (ONRC). Leaside Lane is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Leaside Lane were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 300 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Leaside Lane has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Chiltern Crescent: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Leaside Lane has the following information:

- o Collective Risk band of **Low Medium**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.32. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Leaside Lane, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Leybourne Circle (Glen Innes)</u>

The speed limit on Leybourne Circle, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Leybourne Circle connects to Courtland Avenue to the north, Overlea Road to the west, Fenchurch Street to the south, and Mansfield Street to the east. This road provides access to residential properties and is approximately 1.6 km in length.
	Leybourne Circle is classified as a Secondary Collector road under the one network road classification (ONRC). Leybourne Circle is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records four crashes between 2016 and 2020
	Four non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Leybourne Circle were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Winding Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 520 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Leybourne Circle has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Courtland Avenue: 50 km/h Ridgeway Place: 50 km/h Overlea Road: 50 km/h Linthorpe Crescent: 50 km/h Fenchurch Street: 50 km/h Lyndale Place: 50 km/h Mansfield Street: 50 km/h Guildford Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Leybourne Circle has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.60. For urban areas this corresponds to an IRR band of **Medium High.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Leybourne Circle, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Linthorpe Crescent (Glen Innes)</u>

The speed limit on Linthorpe Crescent, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Linthorpe Crescent connects to Elstree Avenue to the west and Leybourne Circle to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Linthorpe Crescent is classified as a Secondary Collector road under the one network road classification (ONRC). Linthorpe Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Linthorpe Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1456 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Linthorpe Crescent has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Elstreet Avenue: 50 km/h • Leybourne Circle: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Linthorpe Crescent has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.33. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Linthorpe Crescent, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Luke Street (Otahuhu)

The speed limit on Luke Street, Otahuhu has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Luke Street connects to Atkinson Avenue to the west. This road provides access to residential properties and is approximately 0.9 km in length.
	Luke Street is classified as a Secondary Collector road under the one network road classification (ONRC). Luke Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	Two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Luke Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Wide shoulder (>2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2429 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Luke Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Atkinson Avenue: 50 km/h • Church Street: 50 km/h • Hutton Street: 50 km/h • Albert Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Luke Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.94. For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Luke Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Lyford Crescent (Sunnynook)</u>

The speed limit on Lyford Crescent, Sunnynook has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Lyford Crescent connects to Tonkin Drive to the south. This road provides access to residential properties and is approximately 0.3 km in length.
	Lyford Crescent is classified as an Access road under the one network road classification (ONRC). Lyford Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Lyford Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 132 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Lyford Crescent has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Tonkin Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Lyford Crescent has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.08 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Lyford Crescent, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Lyndale Place (Glen Innes)</u>

The speed limit on Lyndale Place, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Lyndale Place connects to Leybourne Circle to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Lyndale Place is classified as an Access road under the one network road classification (ONRC). Lyndale Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Lyndale Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 200 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Lyndale Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Leybourne Circle: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Lyndale Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.41. For urban areas this corresponds to an IRR band of **Medium High.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Lyndale Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Lyons Avenue (Murrays Bay)

The speed limit on Lyons Avenue, Murrays Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Lyons Avenue connects to Beach Road to the north and Beach Road to the south. This road provides access to residential properties and is approximately 0.9 km in length.
	Lyons Avenue is classified as a Secondary Collector road under the one network road classification (ONRC). Lyons Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records four crashes between 2016 and 2020
	One minor and three non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Lyons Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2704 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Lyons Avenue has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Beach Road: 50 km/h Rossmore Terrace: 50 km/h Westbourne Road: 50 km/h Saddleback Rise: 50 km/h Montana Avenue: 50 km/h Wyoming Avenue: 50 km/h Seaton Road: 50 km/h Jellicoe Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Lyons Avenue has the following information:

- o Collective Risk band of **Low Medium**, and a Personal Risk band of **Medium**
- The Infrastructure Risk Rating Score is 2.75 For urban areas this corresponds to an IRR band of **Medium High**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Lyons Avenue, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Speed Limit Review – Macnay Way (Murrays Bay)

The speed limit on Macnay Way, Murrays Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Macnay Way connects to Saddleback Rise to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Macnay Way is classified as an Access road under the one network road classification (ONRC). Macnay Way is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Macnay Way were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 127 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Macnay Way has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Saddleback Rise: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Macnay Way has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.17 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Macnay Way, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Manene Street (Wattle Downs)

The speed limit on Manene Street, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Manene Street connects to Turnberry Drive to the north and Hadley Wood Drive to the south. This road provides access to residential properties and is approximately 0.4 km in length.
	Manene Street is classified as an Access road under the one network road classification (ONRC). Manene Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Manene Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Manene Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Turnberry Drive: 50 km/h Creda Road: 50 km/h Kirkaldy Street: 50 km/h Disley Road: 50 km/h Wick Place: 50 km/h Hadley Wood Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Manene Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Medium.
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Manene Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Manor Place (Point Chevalier)

The speed limit on Manor Place, Point Chevalier has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Manor Place connects to Pasadena Avenue to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Manor Place is classified as an Access road under the one network road classification (ONRC). Manor Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Manor Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Wide shoulder (1.0m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 100 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Manor Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Pasadena Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Manor Place has the following information:

- Collective Risk band of Low and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.90 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Manor Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Mansfield Street (Glen Innes)</u>

The speed limit on Mansfield Street, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Mansfield Street connects to Leybourne Circle to the north and Taniwha Street to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Mansfield Street is classified as a Secondary Collector road under the one network road classification (ONRC). Mansfield Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Mansfield Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 728 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Mansfield Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Leybourne Circle: 50 km/h • Sunnymead Street: 50 km/h • Taniwha Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Mansfield Street has the following information:

- o Collective Risk band of **Low Medium**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.18. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Mansfield Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Marsden Street (Hauraki)</u>

The speed limit on Marsden Street, Hauraki has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Marsden Street connects to Waitemata Road to the north. This road provides access to residential properties and is approximately 0.4 km in length.
	Marsden Street is classified as an Access road under the one network road classification (ONRC). Marsden Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Marsden Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Narrow Shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 127 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Marsden Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Waitemata Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Marsden Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.82 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Marsden Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Masters Place (Favona)

The speed limit on Masters Place, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Masters Place connects to Donnell Avenue to the east. This road provides access to residential properties and is approximately 0.4 km in length.
	Masters Place is classified as an Access road under the one network road classification (ONRC). Masters Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Masters Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) based on MegaMaps was determined as 250 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Masters Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Donnell Avenue: 50 km/h • Stardon Place: 50 km/h • Rehua Place: 50 km/h • Austin Brave Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Masters Place has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium High
- The Infrastructure Risk Rating Score is 2.55. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Masters Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Matipo Road (Mairangi Bay)</u>

The speed limit on Matipo Road, Mairangi Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Matipo Road connects to Ramsgate Terrace to the north and East Coast Road to the south. This road provides access to residential properties and is approximately 0.8 km in length.
	Matipo Road is classified as a Secondary Collector road under the one network road classification (ONRC). Matipo Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020
	Three non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Matipo Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2695 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Matipo Road has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Ramsgate Terrace: 50 km/h Agathis Aveune: 50 km/h Galaxy Drive: 50 km/h East Coast Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Matipo Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.81 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Matipo Road, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Speed Limit Review - May Road (Mangere East)

The speed limit on May Road, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	May Road connects to Rosella Road to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	May Road is classified as an Access road under the one network road classification (ONRC). May Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for May Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Narrow Lane (<3.0 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 100 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of May Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Rosella Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps May Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.49. For urban areas this corresponds to an IRR band of **Medium High.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for May Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Mayflower Close (Mangere East)

The speed limit on Mayflower Close, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Mayflower Close connects to Raglan Street to the north. This road provides access to residential properties and is approximately 0.7 km in length.
	Mayflower Close is classified as a Secondary Collector road under the one network road classification (ONRC). Mayflower Close is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Mayflower Close were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 1 to <2 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1253 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Mayflower Close has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Raglan Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Mayflower Close has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.11. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Mayflower Close, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Mayville Avenue (Grey Lynn)</u>

The speed limit on Mayville Avenue, Grey Lynn has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Mayville Avenue connects to Astley Avenue to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Mayville Avenue is classified as an Access road under the one network road classification (ONRC). Mayville Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Mayville Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Wide shoulder (1.0m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersection per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 243 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Mayville Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Astley Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Mayville Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.90. For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Mayville Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - McVilly Road (Manurewa)

The speed limit on McVilly Road, Manurewa has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	McVilly Road connects to Browns Road to the south. This road provides access to properties and is approximately 0.4 km in length.
	McVilly Road is classified as an Access road under the one network road classification (ONRC). McVilly Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	Two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for McVilly Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Commercial Big Box/Industrial using MegaMaps tool. The IRR defines Commercial Big Box/Industrial as "Large (big box) shops and/or industry/factories with intermittent large accessways and intersections leading to large car parking areas. Regular intersections and smaller accesses are also likely to be present. Some pedestrian and cyclist activity may be present."

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 2 to <3 intersections per km Access density: 5 to <10 accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 717 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of McVilly Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Browns Road: 50 km/h Russell Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps McVilly Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.13. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for McVilly Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Meadow Crescent (Te Atatu South)

The speed limit on Meadow Crescent, Te Atatu South has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Meadow Crescent connects to Tirimoana Road to the west. This road provides access to residential properties and is approximately 0.2 km in length.
	Meadow Crescent is classified as an Access road under the one network road classification (ONRC). Meadow Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Meadow Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 – 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 146 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Meadow Crescent has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Tirimoana Road: 50 km/h Talavera Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Meadow Crescent has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.41 For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Meadow Crescent, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Metric Place (Te Atatu South)

The speed limit on Metric Place, Te Atatu South has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Metric Place connects to Divich Avenue to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Metric Place is classified as an Access road under the one network road classification (ONRC). Metric Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Metric Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Narrow Lane (<3.0 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 100 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Metric Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Divich Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Metric Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.49 For urban areas this corresponds to an IRR band of **Medium High**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Metric Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Middlesex Road (Waterview)</u>

The speed limit on Middlesex Road, Waterview has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Middlesex Road connects to Alford Street to the north and Fir Street to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Middlesex Road is classified as an Access road under the one network road classification (ONRC). Middlesex Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Middlesex Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Wide Shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 104 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Middlesex Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Alford Street: 50 km/h • Alverston Street: 50 km/h • Fir Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Middlesex Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.18 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Middlesex Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Mikasa Place (Mangere)

The speed limit on Mikasa Place, Mangere has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Mikasa Place connects to Court Town Close to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Mikasa Place is classified as an Access road under the one network road classification (ONRC). Mikasa Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Mikasa Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Narrow Lane (<3.0 m) and Very Narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 170 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Mikasa Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Court Town Close: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Mikasa Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.46. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Mikasa Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Millen Avenue (Pakuranga)</u>

The speed limit on Millen Avenue, Pakuranga has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Millen Avenue connects to Pakuranga Road to the north. This road provides access to residential properties and is approximately 0.7 km in length.
	Millen Avenue is classified as a Secondary Collector road under the one network road classification (ONRC). Millen Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Millen Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1346 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Millen Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Dillimore Avenue: 50 km/h Pakuranga Road: 60 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Millen Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.55 For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Millen Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Moki Place (Long Bay)

The speed limit on Moki Place, Long Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Moki Place connects to Pennant Street to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Moki Place is classified as an Access road under the one network road classification (ONRC). Moki Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Moki Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 50 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Moki Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Turutu Place: 50 km/h Pennant Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Moki Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Moki Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Moncrieff Avenue (Clendon Park)

The speed limit on Moncrieff Avenue, Clendon Park has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Moncrieff Avenue connects to Finlayson Avenue to the north and Roscommon Road to the east. This road provides access to residential properties and is approximately 0.6 km in length.
	Moncrieff Avenue is classified as an Access road under the one network road classification (ONRC). Moncrieff Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records six crashes between 2016 and 2020
	One serious, one minor, and four non-injury crashes. This resulted in one Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Moncrieff Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1079 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Moncrieff Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Finlayson Avenue: 50 km/h • Trounson Avenue: 50 km/h • Iris Place: 50 km/h • Frobisher Way: 50 km/h • Roscommon Road: 60 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Moncrieff Avenue has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium High.
- The Infrastructure Risk Rating Score is 2.30. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Moncrieff Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Montana Avenue (Murrays Bay)

The speed limit on Montana Avenue, Murrays Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Montana Avenue connects to Lyons Avenue to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Montana Avenue is classified as an Access road under the one network road classification (ONRC). Montana Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Montana Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 127 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Montana Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Lyons Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Montana Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.91 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Montana Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Moray Place (Point Chevalier)

The speed limit on Moray Place, Point Chevalier has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Moray Place connects to Pasadena Avenue to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Moray Place is classified as an Access road under the one network road classification (ONRC). Moray Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Moray Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Wide shoulder (1.0m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 100 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Moray Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Pasadena Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Moray Place has the following information:

- Collective Risk band of Low and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.90 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Moray Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Morewood Lane (Favona)

The speed limit on Morewood Lane, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Morewood Lane connects to Tilberg Street to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Morewood Lane is classified as an Access road under the one network road classification (ONRC). Morewood Lane is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Morewood Lane were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) based on MegaMaps was determined as 250 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Morewood Lane has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Tilberg Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Morewood Lane has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium High
- The Infrastructure Risk Rating Score is 2.55. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Morewood Lane, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Nui Mana Place (Te Atatu South)

The speed limit on Nui Mana Place, Te Atatu South has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Nui Mana Place connects to Kokiri Street at its northern end and Taitua Drive at its southern end. This road provides access to residential properties and is approximately 0.5 km in length.
	Nui Mana Place is classified as a Secondary Collector road under the one network road classification (ONRC). Nui Mana Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Nui Mana Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 1 to <2 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 461 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Nui Mana Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Kokiri Street: 50 km/h • Taitua Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Nui Mana Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 1.80 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Nui Mana Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Oak Grove (Otahuhu)

The speed limit on Oak Grove, Otahuhu has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Oak Grove connects to Princes Street to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Oak Grove is classified as an Access road under the one network road classification (ONRC). Oak Grove is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Oak Grove were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Narrow Lane (<3.0 m) and Very Narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: <1 intersection per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 250 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Oak Grove has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Princes Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Oak Grove has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.04. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Oak Grove, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Oakley Avenue (Waterview)

The speed limit on Oakley Avenue, Waterview has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Oakley Avenue connects to Great North Road to the east. This road provides access to residential properties and is approximately 0.7 km in length.
	Oakley Avenue is classified as a Secondary Collector road under the one network road classification (ONRC). Oakley Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020
	Three non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Oakley Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Wide Shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2059 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Oakley Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Great North Road: 50 km/h • Saxon Street: 50 km/h • Howlett Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Oakley Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.81 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Oakley Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review -</u> Overlea Road (Glen Innes)

The speed limit on Overlea Road, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Overlea Road connects to Elstree Avenue to the west and Leybourne Circle to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Overlea Road is classified as an Access road under the one network road classification (ONRC). Overlea Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One serious injury crash. This resulted in one Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Overlea Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 624 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Overlea Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Elstreet Avenue: 50 km/h • Leybourne Circle: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Overlea Road has the following information:

- o Collective Risk band of **Low Medium**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.60. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Overlea Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Paddington Street (Glen Innes)</u>

The speed limit on Paddington Street, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Paddington Street connects to West Tamaki Road to the north and Farringdon Street to the south. This road provides access to residential properties and is approximately 0.6 km in length.
	Paddington Street is classified as a Secondary Collector road under the one network road classification (ONRC). Paddington Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One minor injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Paddington Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 208 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Paddington Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • West Tamaki Road: 50 km/h • Bromley Place: 50 km/h • Sloane Street: 50 km/h • Wimbledon Crescent: 50 km/h • Farringdon Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Paddington Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.06. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Paddington Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Partridge Street (Grey Lynn)

The speed limit on Partridge Street, Grey Lynn has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Partridge Street connects to Waima Street to the north and Kirk Street to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Partridge Street is classified as an Access road under the one network road classification (ONRC). Partridge Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Partridge Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 104 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Partridge Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Waima Street: 50 km/h • Kirk Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Partridge Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Partridge Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Pasadena Avenue (Point Chevalier)

The speed limit on Pasadena Avenue, Point Chevalier has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Pasadena Avenue connects to Premier Avenue to the west. This road provides access to residential properties and is approximately 0.2 km in length.
	Pasadena Avenue is classified as an Access road under the one network road classification (ONRC). Pasadena Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Pasadena Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Wide shoulder (1.0m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 100 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Pasadena Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Moray Place: 50 km/h • Manor Place: 50 km/h • Premier Avenue: 50 km/h • Riro Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Pasadena Avenue has the following information:

- o Collective Risk band of Low and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.90 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Pasadena Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Pate Crescent (Favona)

The speed limit on Pate Crescent, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Pate Crescent connects to Hall Avenue to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Pate Crescent is classified as an Access road under the one network road classification (ONRC). Pate Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Pate Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 40 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Pate Crescent has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Hall Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Pate Crescent has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.41. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Pate Crescent, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Penguin Drive (Murrays Bay)

The speed limit on Penguin Drive, Murrays Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
	·
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Penguin Drive connects to Saddleback Rise to the east. This road provides access to residential properties and is approximately 0.8 km in length.
	Penguin Drive is classified as an Access road under the one network road classification (ONRC). Penguin Drive is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Penguin Drive were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1603 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Penguin Drive has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Saddleback Rise: 50 km/h Seaford Place: 50 km/h Bellbird Rise: 50 km/h Stitchbird Close: 50 km/h Adelie Place: 50 km/h Rosella Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Penguin Drive has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.97 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Penguin Drive, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Speed Limit Review – Pennant Street (Long Bay)

The speed limit on Pennant Street, Long Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Pennant Street connects to Glenvar Ridge Road to the north and Cavalli Road to the south. This road provides access to residential properties and is approximately 0.4 km in length.
	Pennant Street is classified as an Access road under the one network road classification (ONRC). Pennant Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Pennant Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 50 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Pennant Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Glenvar Ridge Road: 50 km/h • Karengo Street: 50 km/h • Windlass Street: 50 km/h • Cavalli Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Pennant Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Pennant Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Pickett Avenue (Sandringham)

The speed limit on Pickett Avenue, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Pickett Avenue connects to Haverstock Road to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Pickett Avenue is classified as an Access road under the one network road classification (ONRC). Pickett Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Pickett Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 150 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Pickett Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Haverstock Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Pickett Avenue has the following information:

- o Collective Risk band of **Low** and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.44 For urban areas this corresponds to an IRR band of **Medium High**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Pickett Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Pine Ridge Terrace (Hauraki)

The speed limit on Pine Ridge Terrace, Hauraki has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Pine Ridge Terrace connects to Herbert Street to the west and Jutland Road to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Pine Ridge Terrace is classified as an Access road under the one network road classification (ONRC). Pine Ridge Terrace is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Pine Ridge Terrace were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Very Narrow Shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 205 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Pine Ridge Terrace has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Herbert Street: 50 km/h Jutland Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Pine Ridge Terrace has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.91 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Pine Ridge Terrace, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Pompallier Terrace (Ponsonby)</u>

The speed limit on Pompallier Terrace, between Ardmore Road and John Street, Ponsonby has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Pompallier Terrace connects to Ardmore Road to the west and Ponsonby Road to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Pompallier Terrace is classified as a Primary Collector road under the one network road classification (ONRC). Pompallier Terrace is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Pompallier Terrace were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Wide shoulder (>2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 3640 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Pompallier Terrace has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Ardmore Road: 50 km/h • John Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Pompallier Terrace has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium.**
- The Infrastructure Risk Rating Score is 2.22. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Pompallier Terrace, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Premier Avenue (Point Chevalier)

The speed limit on Premier Avenue, Point Chevalier has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Premier Avenue connects to Great North Road to the south and Kanuka Street to the north. This road provides access to residential properties and is approximately 0.7 km in length.
	Premier Avenue is classified as a Secondary Collector road under the one network road classification (ONRC). Premier Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	Two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Premier Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Very Wide shoulder (>2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 752 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Premier Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Great North Road: 50 km/h • Pasadena Avenue: 50 km/h • Riro Street: 50 km/h • Tui Street: 50 km/h • Kettle Street: 50 km/h • Kanuka Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Premier Avenue has the following information:

- o Collective Risk band of **Low** and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.79 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Premier Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Raamuri Road (Glen Innes)</u>

The speed limit on Raamuri Road, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Raamuri Road connects to Linthorpe Crescent to the north and Ev Perry Way to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Raamuri Road is classified as an Access road under the one network road classification (ONRC). Raamuri Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in one Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Raamuri Road are estimates determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) was determined from MegaMaps as 150 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Raamuri Road has an estimated mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Linthorpe Crescent: 50 km/h Ev Perry Way: 50 km/h

Step 2: Determine the road safety metrics and IRR score

Raamuri Road has the following information based on estimates from MegaMaps:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium.
- The Infrastructure Risk Rating Score is 2.60. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Raamuri Road, the estimated operating speed based on the MegaMaps tool is: <30 km/h.

Speed Limit Review - Raglan Street (Mangere East)

The speed limit on Raglan Street, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Raglan Street connects to Buckland Road to the north and Hokianga Street to the east. This road provides access to residential properties and is approximately 1.2 km in length.
	Raglan Street is classified as a Primary Collector road under the one network road classification (ONRC). Raglan Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records nine crashes between 2016 and 2020
	One serious, two minor, and six non-injury crashes. This resulted in one Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Raglan Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 3122 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Raglan Street has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Buckland Road: 50 km/h Kairanga Street: 50 km/h Tiari Place: 50 km/h Winthrop Way: 50 km/h Mayflower Close: 50 km/h Haddon Street: 50 km/h Cheviot Street: 50 km/h Hokianga Street: 50 km/h Woburn Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Raglan Street has the following information:

- o Collective Risk band of **Low Medium**, and a Personal Risk band of **Medium High**
- The Infrastructure Risk Rating Score is 2.49. For urban areas this corresponds to an IRR band of **Medium High.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Raglan Street, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Speed Limit Review - Ralph Eagles Place (Long Bay)

The speed limit on Ralph Eagles Place, Long Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Ralph Eagles Place connects to Ashley Avenue to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Ralph Eagles Place is classified as an Access road under the one network road classification (ONRC). Ralph Eagles Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Ralph Eagles Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: <1 intersection per km Access density: 5 to <10 accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 132 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Ralph Eagles Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Ashley Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Ralph Eagles Place has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.65 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Ralph Eagles Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Reg Pearce Way (Glen Innes)

The speed limit on Reg Pearce Way, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Reg Pearce Way connects to Elstree Avenue to the west and Leybourne Circle to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Reg Pearce Way is classified as an Access road under the one network road classification (ONRC). Reg Pearce Way is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in one Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Reg Pearce Way are estimates determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) was determined from MegaMaps as 150 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Reg Pearce Way has an estimated mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Elstreet Avenue: 50 km/h • Leybourne Circle: 50 km/h

Step 2: Determine the road safety metrics and IRR score

Reg Pearce Way has the following information based on estimates from MegaMaps:

- o Collective Risk band of **Low Medium**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.60. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Reg Pearce Way, the estimated operating speed based on the MegaMaps tool is: <30 km/h.

Speed Limit Review - Rehua Place (Favona)

The speed limit on Rehua Place, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Rehua Place connects to Masters Place to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Rehua Place is classified as an Access road under the one network road classification (ONRC). Rehua Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	Two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Rehua Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) based on MegaMaps was determined as 250 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Rehua Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Masters Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Rehua Place has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium High
- The Infrastructure Risk Rating Score is 2.55. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Rehua Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Ridgeway Place (Glen Innes)</u>

The speed limit on Ridgeway Place, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Ridgeway Place connects to Leybourne Circle to the west. This road provides access to residential properties and is approximately 0.3 km in length.
	Ridgeway Place is classified as an Access road under the one network road classification (ONRC). Ridgeway Place is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One minor injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Ridgeway Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 364 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Ridgeway Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Leybourne Circle: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Ridgeway Place has the following information:

- o Collective Risk band of **Low Medium**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.41. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Ridgeway Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Riro Street (Point Chevalier)

The speed limit on Riro Street, Point Chevalier has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Riro Street connects to Kanuka Street to the north and Premier Avenue to the south. This road provides access to residential properties and is approximately 0.6 km in length.
	Riro Street is classified as a Secondary Collector road under the one network road classification (ONRC). Riro Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	Two minor injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Riro Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Very Wide shoulder (>2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 245 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Riro Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Kanuka Street: 50 km/h • Tui Street: 50 km/h • Premier Avenue: 50 km/h • Pasadena Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Riro Street has the following information:

- o Collective Risk band of Low and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.79 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Riro Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Rod Place (Mangere East)

The speed limit on Rod Place, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Rod Place connects to Rosella Road to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Rod Place is classified as an Access road under the one network road classification (ONRC). Rod Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Rod Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 60 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Rod Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Rosella Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Rod Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.44. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Rod Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Rosella Place (Murrays Bay)</u>

The speed limit on Rosella Place, Murrays Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Rosella Place connects to Penguin Drive to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Rosella Place is classified as an Access road under the one network road classification (ONRC). Rosella Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Rosella Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) based on MegaMaps was determined as 150 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Rosella Place has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Penguin Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Rosella Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.97 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Rosella Place, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Speed Limit Review - Rosella Road (Mangere East)

The speed limit on Rosella Road, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Rosella Road connects to Massey Road to the north and Gray Avenue to the south. This road provides access to residential properties and is approximately 0.9 km in length.
	Rosella Road is classified as a Secondary Collector road under the one network road classification (ONRC). Rosella Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records nine crashes between 2016 and 2020
	Two minor and seven non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Rosella Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1989 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Rosella Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Massey Road: 50 km/h • Rod Place: 50 km/h • May Place: 50 km/h • Chaplin Street: 50 km/h • Thompson Street: 50 km/h • Gray Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Rosella Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Medium
- The Infrastructure Risk Rating Score is 2.21. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Rosella Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Roseway Place (Glen Innes)</u>

The speed limit on Roseway Place, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Roseway Place connects to Ridgeway Place to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Roseway Place is classified as an Access road under the one network road classification (ONRC). Roseway Place is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Roseway Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 364 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Roseway Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Ridgeway Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Roseway Place has the following information:

- o Collective Risk band of **Low Medium**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.41. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Roseway Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Rossmore Terrace (Murrays Bay)

The speed limit on Rossmore Terrace, Murrays Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Rossmore Terrace connects to Lyons Avenue to the north and Clematis Avenue to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Rossmore Terrace is classified as a Secondary Collector road under the one network road classification (ONRC). Rossmore Terrace is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Rossmore Terrace were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 517 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Rossmore Terrace has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Clematis Avenue: 50 km/h Aotearoa Terrace: 50 km/h Lyons Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Rossmore Terrace has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.41 For urban areas this corresponds to an IRR band of **Medium High**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Rossmore Terrace, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Saddleback Rise (Murrays Bay)

The speed limit on Saddleback Rise, Murrays Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Saddleback Rise connects to Lyons Avenue to the east and Sunrise Avenue to the south. This road provides access to residential properties and is approximately 0.9 km in length.
	Saddleback Rise is classified as a Secondary Collector road under the one network road classification (ONRC). Saddleback Rise is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Saddleback Rise were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 696 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Saddleback Rise has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Lyons Avenue: 50 km/h • Aotearoa Terrace: 50 km/h • Macnay Way: 50 km/h • Pengiun Drive: 50 km/h • Sunrise Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Saddleback Rise has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.32 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Saddleback Rise, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Speed Limit Review - Sainsbury Road (Mount Albert)

The speed limit on Sainsbury Road, Mount Albert has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Sainsbury Road connects to New North Road to the west and Morningside Drive to the east. This road provides access to residential properties and is approximately 0.5 km in length.
	Sainsbury Road is classified as a Primary Collector road under the one network road classification (ONRC). Sainsbury Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records four crashes between 2016 and 2020
	Two minor and two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Sainsbury Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Very Wide shoulder (>2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 3689 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Sainsbury Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: New North Road: 50 km/h Taylors Road: 50 km/h Morningside Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Sainsbury Road has the following information:

- o Collective Risk band of **Medium** and a Personal Risk band of **High**.
- The Infrastructure Risk Rating Score is 1.94 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Sainsbury Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Saxon Street (Waterview)

The speed limit on Saxon Street, Waterview has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Saxon Street connects to Daventry Street to the north. This road provides access to residential properties and is approximately 0.6 km in length.
	Saxon Street is classified as a Secondary Collector road under the one network road classification (ONRC). Saxon Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Saxon Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Wide Shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 826 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Saxon Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Daventry Street: 50 km/h • Oakley Avenue: 50 km/h • Alford Street: 50 km/h • Alverston Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Saxon Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.18 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Saxon Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Scotsmoor Drive (Wattle Downs)

The speed limit on Scotsmoor Drive, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Scotsmoor Drive connects to Aberdeen Crescent to the north and Hadley Wood Drive to the south. This road provides access to residential properties and is approximately 0.3 km in length.
	Scotsmoor Drive is classified as an Access road under the one network road classification (ONRC). Scotsmoor Drive is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Scotsmoor Drive were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Scotsmoor Drive has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Aberdeen Crescent: 50 km/h • Turnberry Drive: 50 km/h • Creda Road: 50 km/h • Kirkaldy Street: 50 km/h • Hadley Wood Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Scotsmoor Drive has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Scotsmoor Drive, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Seaford Place (Murrays Bay)

The speed limit on Seaford Place, Murrays Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Seaford Place connects to Penguin Drive to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Seaford Place is classified as an Access road under the one network road classification (ONRC). Seaford Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Seaford Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) based on MegaMaps was determined as 150 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Seaford Place has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Penguin Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Seaford Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.97 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Seaford Place, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Speed Limit Review - Seaside Avenue (Waterview)

The speed limit on Seaside Avenue, Waterview has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Seaside Avenue connects to Fir Street to the north and Fairlands Avenue to the south. This road provides access to residential properties and is approximately 0.4 km in length.
	Seaside Avenue is classified as an Access road under the one network road classification (ONRC). Seaside Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Seaside Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Narrow Shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 2 to <3 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 312 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Seaside Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Fairlands Avenue: 50 km/h • Fir Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Seaside Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.74 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Seaside Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Seaton Road (Murrays Bay)

The speed limit on Seaton Road, Murrays Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Seaton Road connects to Lyons Avenue to the west and Westbourne Road to the south. This road provides access to residential properties and is approximately 0.6 km in length.
	Seaton Road is classified as an Access road under the one network road classification (ONRC). Seaton Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Seaton Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 1 to <2 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 404 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Seaton Road has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Lyons Avenue: 50 km/h • Westbourne Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Seaton Road has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.80 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Seaton Road, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Speed Limit Review - Sequoia Place (Sunnynook)

The speed limit on Sequoia Place, Sunnynook has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Sequoia Place connects to Juniper Road to the south. This road provides access to residential properties and is approximately 0.3 km in length.
	Sequoia Place is classified as an Access road under the one network road classification (ONRC). Sequoia Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Sequoia Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Narrow Shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 127 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Sequoia Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Kerria Place: 50 km/h • Datura Place: 50 km/h • Juniper Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Sequoia Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.06 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Sequoia Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Shayla Place (Favona)

The speed limit on Shayla Place, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Shayla Place connects to Tilberg Street to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Shayla Place is classified as an Access road under the one network road classification (ONRC). Shayla Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Shayla Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) based on MegaMaps was determined as 250 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Shayla Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Tilberg Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Shayla Place has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium High
- The Infrastructure Risk Rating Score is 2.55. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Shayla Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Slim Place (Clendon Park)

The speed limit on Slim Place, Clendon Park has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Slim Place connects to Trounson Avenue to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Slim Place is classified as an Access road under the one network road classification (ONRC). Slim Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Slim Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) based on MegaMaps was determined as 250 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Slim Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Trounson Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Slim Place has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium High.
- The Infrastructure Risk Rating Score is 2.30. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Slim Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review –</u> Sloane Street (Glen Innes)

The speed limit on Sloane Street, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Sloane Street connects to Elstree Avenue to the east and Paddington Street to the west. This road provides access to residential properties and is approximately 0.3 km in length.
	Sloane Street is classified as an Access road under the one network road classification (ONRC). Sloane Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Sloane Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 520 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Sloane Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Paddington Street: 50 km/h Lanark Place: 50 km/h Elstree Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Sloane Street has the following information:

- o Collective Risk band of **Low Medium**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Sloane Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Stardon Place (Favona)

The speed limit on Stardon Place, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Stardon Place connects to Masters Place to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Stardon Place is classified as an Access road under the one network road classification (ONRC). Stardon Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Stardon Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) based on MegaMaps was determined as 250 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Stardon Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Masters Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Stardon Place has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium High
- The Infrastructure Risk Rating Score is 2.55. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Stardon Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Stitchbird Close (Murrays Bay)

The speed limit on Stitchbird Close, Murrays Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Stitchbird Close connects to Penguin Drive to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Stitchbird Close is classified as an Access road under the one network road classification (ONRC). Stitchbird Close is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Stitchbird Close were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	An estimate of Average daily traffic (ADT) based on MegaMaps was determined as 150 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Stitchbird Close has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Penguin Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Stitchbird Close has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.97 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Stitchbird Close, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Speed Limit Review - Stranraer Crescent (Wattle Downs)

The speed limit on Stranraer Crescent, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Stranraer Crescent connects to Aberdeen Crescent to the south. This road provides access to residential properties and is approximately 0.6 km in length.
	Stranraer Crescent is classified as an Access road under the one network road classification (ONRC). Stranraer Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Stranraer Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Stranraer Crescent has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Aberdeen Crescent: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Stranraer Crescent has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Stranraer Crescent, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Strathaven Road (Wattle Downs)</u>

The speed limit on Strathaven Road, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Strathaven Road connects to Kirkaldy Place to the north and Hadley Wood Drive to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Strathaven Road is classified as an Access road under the one network road classification (ONRC). Strathaven Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Strathaven Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Strathaven Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Kirkaldy Street: 50 km/h • Disley Street: 50 km/h • Wick Place: 50 km/h • Hadley Wood Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Strathaven Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Strathaven Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Sunningdale Street (Wattle Downs)

The speed limit on Sunningdale Street, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Sunningdale Street connects to Carnoustie Drive to the east and Hadley Wood Drive to the west. This road provides access to residential properties and is approximately 0.6 km in length.
	Sunningdale Street is classified as an Access road under the one network road classification (ONRC). Sunningdale Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Sunningdale Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Sunningdale Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Carnoustie Drive: 50 km/h Dalmahoy Place: 50 km/h Hadley Wood Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Sunningdale Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium.**
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Sunningdale Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Sunnymead Road (Glen Innes)

The speed limit on Sunnymead Road, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Sunnymead Road connects to Fenchurch Street to the west and Mansfield Street to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Sunnymead Road is classified as an Access road under the one network road classification (ONRC). Sunnymead Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Sunnymead Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 142 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Sunnymead Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Fenchurch Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Sunnymead Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.44. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Sunnymead Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Sydney Street (Hauraki)</u>

The speed limit on Sydney Street, Hauraki has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Sydney Street connects to Charles Street to the west and Jutland Road to the east. This road provides access to residential properties and is approximately 0.4 km in length.
	Sydney Street is classified as an Access road under the one network road classification (ONRC). Sydney Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Sydney Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Very Narrow Shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 205 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Sydney Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Charles Street: 50 km/h Jutland Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Sydney Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.91 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Sydney Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Taitua Drive (Te Atatu South)

The speed limit on Taitua Drive, Te Atatu South has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Taitua Drive connects to Te Atatu Road to the west. This road provides access to residential properties and is approximately 0.2 km in length.
	Taitua Drive is classified as an Access road under the one network road classification (ONRC). Taitua Drive is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020.
	One non injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Taitua Drive were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Narrow Lane (<3.0 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 249 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Taitua Drive has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Nui Mana Place: 50 km/h Te Atatu Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Taitua Drive has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.20 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Taitua Drive, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Talavera Place (Te Atatu South)

The speed limit on Talavera Place, Te Atatu South has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Talavera Place connects to Meadow Crescent to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Talavera Place is classified as an Access road under the one network road classification (ONRC). Talavera Place is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Talavera Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Narrow Lane (<3.0 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 146 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Talavera Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Meadow Crescent: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Talavera Place has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.20 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Talavera Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Taylors Road (Mount Albert)

The speed limit on Taylors Road, between St. Lukes Road and Morningside Drive, Mount Albert has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on	The NZTA Speed Management Guide was used for the review and
speed management provided by the Agency; and	consideration of the speed limit.
(c) the function and use of the road; and	Taylors Road connects to Alberton Avenue to the west and Morningside Drive to the east. This road provides access to residential properties and is approximately 0.9 km in length.
	Taylors Road is classified as a Primary Collector road under the one network road classification (ONRC). Taylors Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020
	Three non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Taylors Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and Very Wide shoulder (>2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Commercial big box/industrial using MegaMaps tool. The IRR defines Commercial big box/industrial as "Large (big box) shops and/or industry/factories with intermittent large accessways and intersections leading to large car parking areas. Regular intersections and smaller accesses are also likely to be present. Some pedestrian and cyclist activity may be present".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 5 to <10 accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 3120 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Taylors Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: St Lukes Road: 50 km/h Sainsbury Road: 50 km/h Gordon Road: 50 km/h Morningside Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Taylors Road has the following information:

- o Collective Risk band of Low and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.23 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Taylors Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Thompson Street (Mangere East)

The speed limit on Thompson Street, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Thompson Street connects to Rosella Road to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Thompson Street is classified as an Access road under the one network road classification (ONRC). Thompson Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Thompson Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 120 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Thompson Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Rosella Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Thompson Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.34. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Thompson Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Tiari Place (Mangere East)

The speed limit on Tiari Place, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Tiari Place connects to Raglan Street to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Tiari Place is classified as an Access road under the one network road classification (ONRC). Tiari Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Tiari Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 120 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Tiari Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Raglan Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Tiari Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.32. For urban areas this corresponds to an IRR band of Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Tiari Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Tilberg Street (Favona)</u>

The speed limit on Tilberg Street, Favona has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Tilberg Street connects to Harriet Street to the south and Robertson Road to the east. This road provides access to residential properties and is approximately 0.4 km in length.
	Tilberg Street is classified as an Access road under the one network road classification (ONRC). Tilberg Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Tilberg Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1929 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Tilberg Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Harriet Street: 50 km/h • Shayla Place: 50 km/h • Morewood Lane: 50 km/h • Alderson Lane: 50 km/h • Robertson Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Tilberg Street has the following information:

- o Collective Risk band of Low Medium, and a Personal Risk band of Medium High
- The Infrastructure Risk Rating Score is 2.55. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Tilberg Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Timu Road (Long Bay)

The speed limit on Timu Road, Long Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Timu Road connects to Glenvar Ridge Road to the north and Karengo Street to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Timu Road is classified as an Access road under the one network road classification (ONRC). Timu Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Timu Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Narrow lane (<3.0 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 50 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Timu Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Glenvar Ridge Road: 50 km/h Karengo Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Timu Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Timu Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Tirimoana Road (Te Atatu South)

The speed limit on Tirimoana Road, between 30 m north of Valron Road and 115 m north of Meadow Crescent, Te Atatu South has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero
	Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Tirimoana Road connects to Te Atatu Road to the west. This road provides access to residential properties and is approximately 0.7 km in length.
	Tirimoana Road is classified as an Access road under the one network road classification (ONRC). Tirimoana Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020
	Three non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Tirimoana Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 4957 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Tirimoana Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Meadow Crescent: 50 km/h • Divich Avenue: 50 km/h • Tracey Terrace: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Tirimoana Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.06 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Tirimoana Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Tomlin Place (Mangere East)

The speed limit on Tomlin Place, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Tomlin Place connects to Cramond Drive to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Tomlin Place is classified as an Access road under the one network road classification (ONRC). Tomlin Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Tomlin Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 665 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Tomlin Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Cramond Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Tomlin Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Medium.
- The Infrastructure Risk Rating Score is 2.06. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Tomlin Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Tonkin Drive (Sunnynook)</u>

The speed limit on Tonkin Drive, Sunnynook has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Tonkin Drive connects to Trinidad Road to the south and Juniper Road to the north. This road provides access to residential properties and is approximately 0.4 km in length.
	Tonkin Drive is classified as a Secondary Collector road under the one network road classification (ONRC). Tonkin Drive is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	Two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Tonkin Drive were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 647 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Tonkin Drive has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Trinidad Road: 50 km/h Lyford Crescent: 50 km/h Jonathan Place: 50 km/h Heather Place: 50 km/h Juniper Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Tonkin Drive has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.06 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Tonkin Drive, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Tracey Terrace (Te Atatu South)

The speed limit on Tracey Terrace, Te Atatu South has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
	·
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Tracey Terrace connects to Tirimoana Road to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Tracey Terrace is classified as an Access road under the one network road classification (ONRC). Tracey Terrace is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Tracey Terrace were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) estimate based on MegaMaps as 150 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Tracey Terrace has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Tirimoana Road: 50 km/h James Scott Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Tracey Terrace has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 1.81 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Tracey Terrace, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Trinidad Road (Sunnynook)

The speed limit on Trinidad Road, Sunnynook has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Trinidad Road connects to Sunnynook Road to the east. This road provides access to residential properties and is approximately 0.4 km in length.
	Trinidad Road is classified as an Access road under the one network road classification (ONRC). Trinidad Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Trinidad Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 205 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Trinidad Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Tonkin Drive: 50 km/h Wylie Avenue: 50 km/h Sunnynook Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Trinidad Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.17 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Trinidad Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore, we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

Speed Limit Review - Trounson Avenue (Clendon Park)

The speed limit on Trounson Avenue, Clendon Park has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Trounson Avenue connects to Moncrieff Avenue to the north. This road provides access to residential properties and is approximately 0.3 km in length.
	Trounson Avenue is classified as an Access road under the one network road classification (ONRC). Trounson Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	Two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Trounson Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1079 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Trounson Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Moncrieff Avenue: 50 km/h • Slim Place: 50 km/h • Aden Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Trounson Avenue has the following information:

- o Collective Risk band of **Low Medium**, and a Personal Risk band of **Medium High.**
- The Infrastructure Risk Rating Score is 2.30. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Trounson Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

<u>Speed Limit Review - Tui Street (Point Chevalier)</u>

The speed limit on Tui Street, between Moa Road and Premier Avenue, Point Chevalier has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Tui Street connects to Premier Avenue to the east and Point Chevalier Road to the west. This road provides access to residential properties and is approximately 0.3 km in length.
	Tui Street is classified as a Secondary Collector road under the one network road classification (ONRC). Tui Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Tui Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1054 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Tui Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Premier Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Tui Street has the following information:

- o Collective Risk band of **Low** and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.05 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Tui Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore, we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

Speed Limit Review - Turnberry Drive (Wattle Downs)

The speed limit on Turnberry Drive, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Turnberry Drive connects to Manene Street to the west and Carnoustie Drive to the east. This road provides access to residential properties and is approximately 0.7 km in length.
	Turnberry Drive is classified as an Access road under the one network road classification (ONRC). Turnberry Drive is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Turnberry Drive were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Turnberry Drive has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	 Manene Street: 50 km/h lwinuku Crescent: 50 km/h Scotsmoor Drive: 50 km/h Belfry Place: 50 km/h Aberdeen Crescent: 50 km/h Carnoustie Drive: 50 km/h Wattle Farm Road: 50 km/h Blackwood Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Turnberry Drive has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Turnberry Drive, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

Speed Limit Review – Turutu Place (Long Bay)

The speed limit on Turutu Place, Long Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Turutu Place connects to Pennant Street to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Turutu Place is classified as an Access road under the one network road classification (ONRC). Turutu Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Turutu Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 50 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Turutu Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Barque Rise: 50 km/h Moki Place: 50 km/h Pennant Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Turutu Place has the following information:

- $\circ\quad$ Collective Risk band of $\boldsymbol{Low},$ and a Personal Risk band of \boldsymbol{Low}
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Turutu Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

<u>Speed Limit Review – Tutuki Street (Waterview)</u>

The speed limit on Tutuki Street, Waterview has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Tutuki Street connects to Fir Street to the north. This road provides access to residential properties and is approximately 0.2 km in length.
	Tutuki Street is classified as an Access road under the one network road classification (ONRC). Tutuki Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Tutuki Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and Very Narrow Shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 250 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Tutuki Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Fir Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Tutuki Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.17 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Tutuki Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore, we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

<u>Speed Limit Review - Verran Road (Birkdale)</u>

The speed limit on Verran Road, between Waipa Road and its northern end, Birkdale has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Verran Road connects to Rangatira Road to the west. This road provides access to residential properties and is approximately 0.8 km in length.
	Verran Road is classified as a Primary Collector road under the one network road classification (ONRC). Verran Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records eight crashes between 2016 and 2020
	One minor and seven non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Verran Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1891 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Verran Road has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • West Glade Crescent: 50 km/h • Rangatira Road: 50 km/h • Waipa Street: 50 km/h • Verbena Road: 50 km/h • Brikdale Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Verran Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.81. For urban areas this corresponds to an IRR band of Low Medium

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Verran Road, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Therefore we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

<u>Speed Limit Review –</u> Waima Street (Grey Lynn)

The speed limit on Waima Street, Grey Lynn has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Waima Street connects to Great North Road to the north and Partridge Street to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Waima Street is classified as an Access road under the one network road classification (ONRC). Waima Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Waima Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 104 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Waima Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Great North Road: 50 km/h • Putiki Street: 50 km/h • Monmouth Street: 50 km/h • Partridge Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Waima Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Waima Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

Speed Limit Review – Waiora Road (Stanmore Bay)

The speed limit on Waiora Road, Stanmore Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Waiora Road connects to D'oyly Drive to the north and Brightside Road to the south. This road provides access to residential properties and is approximately 0.6 km in length.
	Waiora Road is classified as a Secondary Collector road under the one network road classification (ONRC). Waiora Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	Two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Waiora Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2732 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Waiora Road has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: D'oyly Drive: 50 km/h Elliston Crescent: 50 km/h Greta Place: 50 km/h Charlotte Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Waiora Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.33 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Waiora Road, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

Therefore we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

Speed Limit Review - Waitemata Road (Hauraki)

The speed limit on Waitemata Road, Hauraki has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Waitemata Road connects to Jutland Road to the west. This road provides access to residential properties and is approximately 0.3 km in length.
	Waitemata Road is classified as an Access road under the one network road classification (ONRC). Waitemata Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Waitemata Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Narrow Shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 127 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Waitemata Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Jutland Road: 50 km/h • Marden Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Waitemata Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.82 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Waitemata Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore, we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

Speed Limit Review – Walden Place (Mangere East)

The speed limit on Walden Place, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Walden Place connects to Woburn Street to the north. This road provides access to residential properties and is approximately 0.2 km in length.
	Walden Place is classified as an Access road under the one network road classification (ONRC). Walden Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Walden Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 208 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Walden Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Woburn Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Walden Place has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.06. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Walden Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

<u>Speed Limit Review – Walter Street (Hauraki)</u>

The speed limit on Walter Street, Hauraki has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Walter Street connects to Jutland Road to the east. This road provides access to residential properties and is approximately 0.6 km in length.
	Walter Street is classified as an Access road under the one network road classification (ONRC). Walter Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020
	Two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Walter Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Very Narrow Shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 205 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Walter Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Charles Street: 50 km/h Herbert Street: 50 km/h Jutland Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Walter Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.91 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Walter Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Therefore, we have determined 30km/h to be safer and more appropriate as it will be consistent with the expected operating speed of the road, and will have better strategic alignment with national and regional goals including Vision Zero safety outcomes and supporting mode shift to active transport modes for local trips.

Speed Limit Review - Waterbank Crescent (Waterview)

The speed limit on Waterbank Crescent, Waterview has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Waterbank Crescent connects to Herdman Street to the south. This road provides access to residential properties and is approximately 0.4 km in length.
	Waterbank Crescent is classified as an Access road under the one network road classification (ONRC). Waterbank Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Waterbank Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Narrow Shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 208 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Waterbank Crescent has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Herdman Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Waterbank Crescent has the following information:

- o Collective Risk band of **Low** and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.34 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Waterbank Crescent, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - West Glade Crescent (Birkdale)</u>

The speed limit on West Glade Crescent, Birkdale has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	West Glade Crescent connects to Verran Road to the north. This road provides access to residential properties and is approximately 0.2 km in length.
	West Glade Crescent is classified as an Access road under the one network road classification (ONRC). West Glade Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for West Glade Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 127 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of West Glade Crescent has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Verran Road: 50 km/h • Caram Place: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps West Glade Crescent has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for West Glade Crescent, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Westbourne Road (Murrays Bay)

The speed limit on Westbourne Road, Murrays Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Westbourne Road connects to Lyons Avenue to the west and Beach Road to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Westbourne Road is classified as a Secondary Collector road under the one network road classification (ONRC). Westbourne Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Westbourne Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 472 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Westbourne Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Beach Road: 50 km/h Seaton Road: 50 km/h Lyons Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Westbourne Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.44 For urban areas this corresponds to an IRR band of **Medium High**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Westbourne Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Weybridge Crescent (Glen Innes)</u>

The speed limit on Weybridge Crescent, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Weybridge Crescent connects to West Tamaki Road to the north and Line Road to the west. This road provides access to residential properties and is approximately 0.4 km in length.
	Weybridge Crescent is classified as an Access road under the one network road classification (ONRC). Weybridge Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Weybridge Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Wide shoulder (1.0 m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 416 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Weybridge Crescent has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • West Tamaki Road: 50 km/h • Henslow Place: 50 km/h • Line Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Weybridge Crescent has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.90. For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Weybridge Crescent, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Wick Place (Wattle Downs)</u>

The speed limit on Wick Place, Wattle Downs has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Wick Place connects to Manene Street to the west and Strathaven Road to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Wick Place is classified as an Access road under the one network road classification (ONRC). Wick Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Wick Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 455 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Wick Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Manene Street: 50 km/h • Strathaven Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Wick Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium.**
- The Infrastructure Risk Rating Score is 2.08. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Wick Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Wimbledon Crescent (Glen Innes)</u>

The speed limit on Wimbledon Crescent, Glen Innes has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Wimbledon Crescent connects to Paddington Street to the north and Farringdon Street to the south. This road provides access to residential properties and is approximately 0.4 km in length.
	Wimbledon Crescent is classified as an Access road under the one network road classification (ONRC). Wimbledon Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	One minor injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Wimbledon Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to <3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "Urban residential area dominated by housing with frequent driveways and on-street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 208 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Wimbledon Crescent has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Paddington Street: 50 km/h Farringdon Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Wimbledon Crescent has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.06. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Wimbledon Crescent, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Windlass Street (Long Bay)</u>

The speed limit on Windlass Street, Long Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Windlass Street connects to Te Onerona Way to the east and Ashley Avenue to the west. This road provides access to residential properties and is approximately 0.3 km in length.
	Windlass Street is classified as an Access road under the one network road classification (ONRC). Windlass Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Windlass Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and very narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 50 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Windlass Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Ashley Avenue: 50 km/h • Pennant Street: 50 km/h • Te Oneroa Way: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Windlass Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Windlass Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Winthrop Way (Mangere East)

The speed limit on Winthrop Way, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Winthrop Way connects to Henwood Road to the south and Raglan Street to the north. This road provides access to residential properties and is approximately 0.5 km in length.
	Winthrop Way is classified as a Secondary Collector road under the one network road classification (ONRC). Winthrop Way is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020
	One minor and two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Winthrop Way were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Narrow shoulder (0.5 m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1318 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Winthrop Way has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Henwood Road: 50 km/h • Raglan Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Winthrop Way has the following information:

- o Collective Risk band of **Low Medium**, and a Personal Risk band of **Medium**
- The Infrastructure Risk Rating Score is 2.21. For urban areas this corresponds to an IRR band of **Medium.**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Winthrop Way, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Woburn Street (Mangere East)

The speed limit on Woburn Street, Mangere East has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Woburn Street connects to Portage Road to the east and Raglan Street to the north. This road provides access to residential properties and is approximately 0.4 km in length.
	Woburn Street is classified as a Secondary Collector road under the one network road classification (ONRC). Woburn Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Woburn Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1485 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Woburn Street has a mean operating speed in the range of 30 - 34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Raglan Street: 50 km/h Cramond Drive: 50 km/h Walden Place: 50 km/h Portage Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Woburn Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.58. For urban areas this corresponds to an IRR band of Medium High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Woburn Street, the actual operating speed from the MegaMaps tool is: 30 - 34 km/h.

<u>Speed Limit Review – Wylie Avenue (Sunnynook)</u>

The speed limit on Wylie Avenue, Sunnynook has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Wylie Avenue connects to Trinidad Road to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Wylie Avenue is classified as an Access road under the one network road classification (ONRC). Wylie Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Wylie Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 127 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Wylie Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Trinidad Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Wylie Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Wylie Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Wyoming Avenue (Murrays Bay)

The speed limit on Wyoming Avenue, Murrays Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Wyoming Avenue connects to Lyons Avenue to the east. This road provides access to residential properties and is approximately 0.5 km in length.
	Wyoming Avenue is classified as an Access road under the one network road classification (ONRC). Wyoming Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Wyoming Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium Lane (3.0 to 3.5 m) and Very Narrow shoulder (0 m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 2 to <3 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 127 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Wyoming Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Lyons Avenue: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Wyoming Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.83 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Wyoming Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Aberfoyle Street (Epsom)</u>

The speed limit on Aberfoyle Street, Epsom has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Aberfoyle Street connects to Pencarrow Avenue to the north and St Andrews Road to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Aberfoyle Street is classified as an Access road under the one network road classification (ONRC). Aberfoyle Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Aberfoyle Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and wide shoulder (1.0m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 312 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Aberfoyle Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Pencarrow Avenue: 50 km/h (Proposed 30km/h) St Andrews Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Aberfoyle Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Aberfoyle Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Addison Street (Blockhouse Bay)

The speed limit on Addison Street, Blockhouse Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Addison Street connects to Marlowe Road to the west and Taylor Street to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Addison Street is classified as a secondary collector road under the one network road classification (ONRC). Addison Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Addison Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1466 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Addison Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Marlowe Road: 50 km/h (proposed 30 km/h) • Taylor Street: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Addison Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- \circ The Infrastructure Risk Rating Score is 2.49 For urban areas this corresponds to an IRR band of $\bf Medium\ High.$

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Addison Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Albany Road (Ponsonby)

The speed limit on Albany Road, Ponsonby, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Albany Road connects to Jervois Road to the north and to Trinity Street to the south. This road provides access to residential properties and is approximately 0.6 km in length.
	Albany Road is classified as an access road under the one network road classification (ONRC). Albany Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were two non-injury crashes This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Albany Road were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to <3.5m) and very wide shoulder (>2.0m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 785 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Albany Road has a mean operating speed in the range of <30 km/h.
	Note that Albany Road has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Jervois Road: 50km/h • Trinity Street: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Albany Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 1.55 For urban areas this corresponds to an IRR band of Low.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Albany Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Alberton Avenue (Mount Albert)</u>

The speed limit on Alberton Avenue, Mount Albert has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Alberton Avenue connects to New North Road to the north and to Mount Albert Road to the south. This road provides access to residential properties and is approximately 1.1 km in length.
	Alberton Avenue is classified as an arterial road under the one network road classification (ONRC). Alberton Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities. While Alberton Avenue is classified as an arterial due to the traffic volumes using it, the traffic volume is the consequence of two large schools located in the road and its function in the wider network is more consistent with that of a collector road.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records six crashes between 2016 and 2020. This included two serious, one minor and three non-injury crashes.
	This resulted in two Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Alberton Avenue were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist

Requirement	Comments
	activity are also likely to be present, particularly at certain times of the day"
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 5,752 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Alberton Avenue has a mean operating speed in the range of 30 km/h to < 35km/h.
	Note that Alberton Avenue has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	 New North Road: 50 km/h Taylors Road: 50 km/h (proposed 30km/h) Alexis Avenue: 50 km/h (proposed 30km/h) Willis Street: 50 km/h (proposed 30km/h) Lloyd Avenue: 50 km/h (proposed 30km/h) Mount Albert Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Alberton Avenue has the following information:

- o Collective Risk band of Low-Medium, and a Personal Risk band of Medium.
- The Infrastructure Risk Rating Score is 1.94 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 50 km/h

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 50km/h as the safe and appropriate speed for Alberton Avenue, the actual operating speed from the MegaMaps tool is: 33 km/h.

Speed Limit Review - Alexis Avenue (Mount Albert)

The speed limit on Alexis Avenue, Mount Albert has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Alexis Avenue connects to New North Road to the northwest and to Alberton Avenue to the southeast. This road provides access to residential properties and is approximately 0.5 km in length.
	Alexis Avenue is classified as a secondary collector road under the one network road classification (ONRC). Alexis Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020. These were three non-injury crahes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Alexis Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,040 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Alexis Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: New North Road: 50 km/h Violet Street: 50 km/h (proposed 30km/h) Francis Ryan Close: 50 km/h (proposed 30km/h) Kitenui Avenue: 50 km/h (proposed 30km/h) Alberton Avenue: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Alexis Avenue has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low.
- $_{\odot}$ The Infrastructure Risk Rating Score is 2.58 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Alexis Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Allendale Road (Mount Albert)

The speed limit on Allendale Road, Mount Albert has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Allendale Road connects to Lloyd Avenue to the northeast and to Mount Albert Road to the southwest. This road provides access to residential properties and is approximately 0.2 km in length.
	Allendale Road is classified as a secondary collector road under the one network road classification (ONRC). Allendale Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a minor injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Allendale Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was estimated based on MegaMaps as 1,000 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Allendale Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Lloyd Avenue: 50 km/h (proposed 30km/h) Mount Albert Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Allendale Road has the following information:

- o Collective Risk band of Low-Medium, and a Personal Risk band of Medium.
- The Infrastructure Risk Rating Score is 2.21 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Allendale Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Annison Avenue (Glen Eden)

The speed limit on Annison Avenue, Glen Eden, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Annison Avenue connects to Withers Road to the east and terminates at a cul-de-sac to west. This road provides access to residential properties and is approximately 0.4 km in length.
	Annison Avenue is classified as a secondary collector road under the one network road classification (ONRC). Annison Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a minor injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Annison Avenue were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to <3.5m) and narrow shoulder (0.5m to <1.0m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 217 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Annison Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Withers Road: 50km/h (proposed 30km/h) • Coey Place: 50km/h (proposed 30km/h) • Pitcher Place: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Annison Avenue has the following information:

- o Collective Risk band of Low-Medium, and a Personal Risk band of Medium,
- The Infrastructure Risk Rating Score is 2.06 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Annison Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Aporo Drive (Kumeu)

The speed limit on Aporo Drive, Kumeu, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Aporo Drive connects to Korako Drive to the north and to Van Rixel Drive to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Aporo Drive is classified as an access road under the one network road classification (ONRC). Aporo Drive is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Aporo Drive were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was estimated from MegaMaps as 250 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Aporo Drive has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Korako Drive: 50km/h (proposed 30km/h) • Van Rixel Drive: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Aporo Drive has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.75 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Aporo Drive, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Appleyard Crescent (Meadowbank)

The speed limit on Appleyard Crescent, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Appleyard Crescent connects to Fancourt Street to the east and to Temple Street to the west. This road provides access to residential properties and is approximately 0.3 km in length.
	Appleyard Crescent is classified as an access road under the one network road classification (ONRC). Appleyard Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Appleyard Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 535 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Appleyard Crescent has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Fancourt Street: 50 km/h (proposed 30km/h) • Temple Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Appleyard Crescent has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.90 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Appleyard Crescent, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Arabi Street (Sandringham)

The speed limit on Arabi Street, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Arabi Street connects to Balmoral Road to the north and to Calgary Street to the south. This road provides access to residential properties and is approximately 0.8 km in length.
	Arabi Street is classified as a secondary collector road under the one network road classification (ONRC). Arabi Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records six crashes between 2016 and 2020. These included two minor injury and four non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Arabi Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist

Requirement	Comments
	activity are also likely to be present, particularly at certain times of the day"
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,551 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Arabi Street has a mean operating speed in the range of <30 km/h.
	Note that Arabi Street has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	 Balmoral Road: 50 km/h Patterson Street: 50 km/h (proposed 30km/h) Jason Avenue: 50 km/h (proposed 30km/h) Mars Avenue: 50 km/h (proposed 30km/h) Oxton Road: 50 km/h (proposed 30km/h) Tranmere Road: 50 km/h (proposed 30km/h) Halesowen Avenue: 50 km/h (proposed 30km/h) Calgary Road: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Arabi Street has the following information:

- o Collective Risk band of **Low-Medium**, and a Personal Risk band of **Medium-High**.
- The Infrastructure Risk Rating Score is 2.49 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Arabi Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Ardmore Road (Ponsonby)

The speed limit on Ardmore Road, Ponsonby, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Ardmore Road connects to Jervois Road to the north and to Trinity Street to the south. This road provides access to residential properties and is approximately 0.6 km in length.
	Ardmore Road is classified as a secondary collector road under the one network road classification (ONRC). Ardmore Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Ardmore Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to <3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,285 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Ardmore Road has a mean operating speed in the range of <30 km/h.
	Note that Ardmore Road has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Jervois Road: 50km/h • Pompallier Terrace: 50km/h (proposed 30km/h)
	Trinity Street: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Ardmore Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 1.81 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Ardmore Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Argyle Avenue (Pahurehure)</u>

The speed limit on Argyle Avenue, Pahurehure, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Argyle Avenue connects to Manse Road to the north and to Beach Road to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Argyle Avenue is classified as an access road under the one network road classification (ONRC). Argyle Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020. This resulted in zero Dooth and Sorious Injury (DSI). This data
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Argyle Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	From MegaMaps tool: • Intersection density: 3 to<5 intersections per km • Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 639 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Argyle Avenue has a mean operating speed in the range of <30 km/h.
	Note that Argyle Avenue has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Beach Road: 50km/h Manse Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Argyle Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.91 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Argyle Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Armadale Road (Remuera)

The speed limit on Armadale Road, Remuera has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Armadale Road connects to Remuera Road to the north and Lillington Road to the south. This road provides access to residential properties and is approximately 0.6 km in length.
	Armadale Road is classified as a secondary collector road under the one network road classification (ONRC). Armadale Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Armadale Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,664 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Armadale Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Remuera Road: 50km/h Dromorne Road: 50km/h (proposed 30km/h) Norana Avenue: 50km/h (proposed 30km/h) Lillington Road: 50km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Armadale Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.94 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Armadale Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Aspen Street (Avondale)</u>

The speed limit on Aspen Street, Avondale has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Aspen Street connects to Victor Street to the north and Rosebank Road to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Aspen Street is classified as a secondary collector road under the one network road classification (ONRC). Aspen Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Aspen Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and wide shoulder (1m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1109 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Aspen Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Rosebank Road: 50 km/h Victor Street: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Aspen Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.33. For urban areas this corresponds to an IRR band of **Medium**.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Aspen Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Aurora Avenue (Wesley)</u>

The speed limit on Aurora Avenue, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Aurora Avenue connects to Beagle Avenue to the west and to Sandringham Road to the east. This road provides access to residential properties and is approximately 0.5 km in length.
	Aurora Avenue is classified as an access road under the one network road classification (ONRC). Aurora Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records four crashes between 2016 and 2020. These were one minor injury crash and three non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Aurora Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 498 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Aurora Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Sandringham Road: 50km/h Sheppard Avenue: 50km/h (proposed 30km/h) Ttomson Street: 50km/h (proposed 30km/h) Beagle Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Aurora Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Aurora Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Bank Street (Mount Eden)</u>

The speed limit on Bank Street, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Bank Street connects to Balmoral Road to the north and to Wairiki Road to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Bank Street is classified as an access road under the one network road classification (ONRC). Bank Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Bank Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 263 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Bank Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Balmoral Road: 50 km/h Plunket Road: 50 km/h (proposed 30km/h) Wairiki Road: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Bank Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.79 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Bank Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Bathurst Road (Mount Eden)

The speed limit on Bathurst Road, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Bathurst Road connects to Peary Road to the north and to Shackleton Road to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Bathurst Road is classified as an access road under the one network road classification (ONRC). Bathurst Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Bathurst Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 260 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Bathurst Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Shackleton Road: 50 km/h (proposed 30km/h) • Peary Road: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Bathurst Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.34 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Bathurst Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Bayfield Road (Ponsonby)

The speed limit on Bayfield Road, Ponsonby, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Bayfield Road connects to Buller Street to the north and terminates at a dead end to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Bayfield Road is classified as an access road under the one network road classification (ONRC). Bayfield Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Bayfield Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to <3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 200 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Bayfield Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Buller Street: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Bayfield Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 1.82 For urban areas this corresponds to an IRR band of Low-Medium.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Bayfield Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Beagle Avenue (Wesley)</u>

The speed limit on Beagle Avenue, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Beagle Avenue connects to O'Donnell Avenue to the south and to Mount Albert Road to the north. This road provides access to residential properties and is approximately 0.4 km in length.
	Beagle Avenue is classified as a primary collector road under the one network road classification (ONRC). Beagle Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020. These were one minor injury crash and two non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Beagle Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 4,045 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Beagle Avenue has a mean operating speed in the range of 30 km/h to <35 km/h.
	Note that Beagle Avenue has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Mount Albert Road:50km/h • Tyburnia Avenue: 50km/h (proposed 30km/h) • Aurora Avenue: 50km/h (proposed 30km/h) • Triton Avenue: 50km/h (proposed 30km/h) • O'Donnell Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Beagle Avenue has the following information:

- o Collective Risk band of **Low-Medium**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.22 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 50 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 50km/h as the safe and appropriate speed for Beagle Avenue, the actual operating speed from the MegaMaps tool is: 33 km/h.

Speed Limit Review – Beatrix Street (Avondale)

The speed limit on Beatrix Street, Avondale has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Beatrix Street connects to Plane Street to the west and Great North Road to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Beatrix Street is classified as an access road under the one network road classification (ONRC). Beatrix Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Beatrix Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 549 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Beatrix Street has a mean operating speed in the range of 30-34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Beatrix Street: 50 km/h (proposed 30 km/h) Victor Street: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Beatrix Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium**.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Beatrix Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Belcher Street (Wesley)</u>

The speed limit on Belcher Street, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Belcher Street connects to Parkinson Avenue to the north and terminates at a cul-de-sac to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Belcher Street is classified as an access road under the one network road classification (ONRC). Belcher Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Belcher Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 750 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Belcher Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Parkinson Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Belcher Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Belcher Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Belvedere Street (Epsom)</u>

The speed limit on Belvedere Street, Epsom has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Belvedere Street connects to Mount St John Avenue to the north and terminates in a cul-de-sac to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Belvedere Street is classified as a secondary collector road under the one network road classification (ONRC). Belvedere Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Belvedere Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 520 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Belvedere Street has a mean operating speed in the range of <30 km/h.
	Note that Belvedere Street has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Mount St John Avenue: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Belvedere Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.06 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Belvedere Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Bennett Street (Mount Albert)</u>

The speed limit on Bennett Street, Mount Albert has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Bennett Street connects to New North Road to the northwest and to Kitenui Avenue to the southeast. This road provides access to residential properties and is approximately 0.2 km in length.
	Bennett Street is classified as an access road under the one network road classification (ONRC). Bennett Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Bennett Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 156 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Bennett Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: New North Road: 50 km/h Violet Street: 50 km/h (proposed 30km/h) Kitenui Avenue: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Bennett Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.44 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Bennett Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Betts Avenue (Wesley)</u>

The speed limit on Betts Avenue, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Betts Avenue connects to Farrelly Avenue to the north and terminates at a cul-de-sac to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Betts Avenue is classified as an access road under the one network road classification (ONRC). Betts Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Betts Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 100 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Betts Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Farrelly Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Betts Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.44 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Betts Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Blackett Crescent (Meadowbank)</u>

The speed limit on Blackett Crescent, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Blackett Crescent connects to Temple Street to the west and to St Johns Road to the southeast. This road provides access to residential properties and is approximately 0.3 km in length.
	Blackett Crescent is classified as an access road under the one network road classification (ONRC). Blackett Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Blackett Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 535 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Blackett Crescent has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Temple Street: 50 km/h (proposed 30km/h) • Fancourt Street: 50 km/h (proposed 30km/h) • St Johns Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Blackett Crescent has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.90 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Blackett Crescent, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review –</u> Bonnie Brae Road (Meadowbank)

The speed limit on Bonnie Brae Road, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Bonnie Brae Road connects to Meadowbank Road at both ends of the road. This road provides access to residential properties and is approximately 0.4 km in length.
	Bonnie Brae Road is classified as a secondary collector road under the one network road classification (ONRC). Bonnie Brae Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Bonnie Brae Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 312 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Bonnie Brae Road has a mean operating speed in the range of 30 km/h to <35 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Meadowbank Road: 50 km/h (proposed 30km/h) • Macpherson Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Bonnie Brae Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.90 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Bonnie Brae Road, the actual operating speed from the MegaMaps tool is: 30 km/h.

Speed Limit Review - Brixton Road (Mount Eden)

The speed limit on Brixton Road, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Brixton Road connects to Dominion Road to the east and to Eldon Road to the west. This road provides access to residential properties and is approximately 0.3 km in length.
	Brixton Road is classified as a secondary collector road under the one network road classification (ONRC). Brixton Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a minor injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Brixton Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,040 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Brixton Road has a mean operating speed in the range of <30 km/h.
	Note that Brixton Road has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Eldon Road: 50 km/h (proposed 30km/h) • Dominion Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Brixton Road has the following information:

- o Collective Risk band of Low-Medium, and a Personal Risk band of Medium.
- The Infrastructure Risk Rating Score is 1.94 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Brixton Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Buccaneer Street (Wesley)</u>

The speed limit on Buccaneer Street, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Buccaneer Street connects to O'Donnell Avenue to the south and terminates at a cul-de-sac to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Buccaneer Street is classified as an access road under the one network road classification (ONRC). Buccaneer Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Buccaneer Street were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 50 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Buccaneer Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: O'Donnell Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Buccaneer Street has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.44 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Buccaneer Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review -</u> Buller Street (Ponsonby)

The speed limit on Buller Street, Ponsonby, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Buller Street connects to Wharf Road to the west and to Kelmarna Avenue to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Buller Street is classified as a secondary collector road under the one network road classification (ONRC). Buller Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Buller Street were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to <3.5m) and wide shoulder (1.0m to <2.0m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,634 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Buller Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Wharf Road: 50km/h (proposed 30km/h) • Bayfield Road: 50km/h (proposed 30km/h) • Kelmarna Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Buller Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 2.33 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Buller Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Busby Street (Blockhouse Bay)

The speed limit on Busby Street, Blockhouse Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Busby Street connects to Falkirk Street and Ulster Road to the west and Taylor Street to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Busby Street is classified as an access road under the one network road classification (ONRC). Busby Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020. These were non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Busby Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 728 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Busby Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Falkirk Street: 50 km/h (proposed 30 km/h) • Crowther Street: 50 km/h (proposed 30 km/h) • Ulster Road: 50 km/h (proposed 30 km/h) • Taylor Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Busby Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Busby Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Calgary Street (Sandringham)

The speed limit on Calgary Street, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Calgary Street connects to Sandringham Road to the west and Dominion Road to the east. This road provides access to residential properties and is approximately 0.8 km in length.
	Calgary Street is classified as a secondary collector road under the one network road classification (ONRC). Calgary Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records four crashes between 2016 and 2020. All four were non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Calgary Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,428 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Calgary Street has a mean operating speed in the range of <30 km/h.
	This road has a number of traffic control devices (speed humps) providing traffic calming. The impact of these is already reflected in the operating speed set out above.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Sandringham Road: 50 km/h • Arabi Street: 50 km/h (proposed 30km/h) • Kiwitea Street: 50 km/h (proposed 30km/h) • Highcliffe Road: 50 km/h (proposed 30km/h) • Dominion Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Calgary Street has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.21 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Calgary Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Cambourne Road (Sandringham)

The speed limit on Cambourne Road, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Cambourne Road connects to Eldon Road to the east and to Sandringham Road to the west. This road provides access to residential properties and is approximately 0.5 km in length.
	Cambourne Road is classified as a secondary collector road under the one network road classification (ONRC). Cambourne Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Cambourne Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 677 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Cambourne Road has a mean operating speed in the range of <30 km/h. Note that Cambourne Road has existing traffic calming measures
	and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	 The existing speed limits on adjoining roads are: Eldon Road: 50 km/h (proposed 30km/h) Goring Road: 50 km/h (proposed 30km/h) King Edward Street: 50 km/h (proposed 30km/h) Sandringham Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Cambourne Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Cambourne Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Carmen Avenue (Mount Eden)</u>

The speed limit on Carmen Avenue, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Carmen Avenue connects to Dominion Road to the east and terminates at a dead end to the west. This road provides access to residential properties and is approximately 0.2 km in length.
	Carmen Avenue is classified as an access road under the one network road classification (ONRC). Carmen Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Carmen Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 250 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Carmen Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Dominion Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Carmen Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.08 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Carmen Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Chaucer Place (Blockhouse Bay)

The speed limit on Chaucer Place, Blockhouse Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Chaucer Place connects to Congreve Place and Meredith Street to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Chaucer Place is classified as an access road under the one network road classification (ONRC). Chaucer Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Chaucer Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Narrow lane (<3.0m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 312 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Chaucer Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Congreve Place: 50 km/h (proposed 30 km/h) Meredith Street: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Chaucer Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.2 For urban areas this corresponds to an IRR band of **Medium**.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Chaucer Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Christini Street (Wesley)</u>

The speed limit on Christini Street, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Christini Street connects to Farrelly Avenue to the south and terminates at a cul-de-sac to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Christini Street is classified as an access road under the one network road classification (ONRC). Christini Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Christini Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 200 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Christini Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Farrelly Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Christini Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.44 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Christini Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Clark Road (Papakura)

The speed limit on Clark Road, Papakura, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Clark Road connects to Hanover Place to the west and to Great South Road to the east. This road provides access to residential properties and is approximately 0.9 km in length.
	Clark Road is classified as a secondary collector road under the one network road classification (ONRC). Clark Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records four crashes between 2016 and 2020. These were four non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Clark Road were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,283 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Clark Road has a mean operating speed in the range of 30 km/h to <35 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Great South Road: 50km/h Joyce Street: 50km/h (proposed 30km/h) Hanover Place: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Clark Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.97 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Clark Road, the actual operating speed from the MegaMaps tool is: 31 km/h.

Speed Limit Review - Clyde Street (Epsom)

The speed limit on Clyde Street, Epsom has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Clyde Street connects to Manukau Road to the west and to Erin Street to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Clyde Street is classified as a primary collector road under the one network road classification (ONRC). Clyde Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records five crashes between 2016 and 2020. These were five non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Clyde Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Commercial Big Box/industrial using MegaMaps tool. The IRR defines Commercial Big Box/industrial as "Large (big box) shops and/or industry/factories with intermittent large accessways and intersections leading to large car parking areas. Regular

Requirement	Comments
	intersections and smaller accesses are also likely to be present. Some pedestrian and cyclist activity may be present."
(g) the number of intersections and property accessways; and	From MegaMaps tool: • Intersection density: 10+ intersections per km • Access density: 5 to <10+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 3,120 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Clyde Street has a mean operating speed in the range of <30 km/h.
	Note that Clyde Street has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Manukau Road Road: 50 km/h Margot Street: 50 km/h (proposed 30km/h) Ngaire Avenue: 50 km/h (proposed 30km/h) Erin Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Clyde Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.62 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Clyde Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Coey Place (Glen Eden)

The speed limit on Coey Place, Glen Eden, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Coey Place connects to Annison Avenue Road to the south and terminates at a cul-de-sac to north. This road provides access to residential properties and is approximately 0.2 km in length.
	Coey Place is classified as an access road under the one network road classification (ONRC). Coey Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a minor injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Coey Place were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Curved • Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 290 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Coey Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Annison Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Coey Place has the following information:

- o Collective Risk band of Low-Medium, and a Personal Risk band of Medium.
- The Infrastructure Risk Rating Score is 2.17 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Coey Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Colorado Place (Avondale)</u>

The speed limit on Colorado Place, Avondale has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Colorado Place connects to Holly Street to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Colorado Place is classified as an access road under the one network road classification (ONRC). Colorado Place is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Colorado Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 150 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Colorado Place has a mean operating speed in the range of 30-34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Holly Street: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Colorado Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.44. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Colorado Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Congreve Place (Blockhouse Bay)</u>

The speed limit on Congreve Place, Blockhouse Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Congreve Place connects to Congreve Place and Meredith Street to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Congreve Place is classified as an access road under the one network road classification (ONRC). Congreve Place is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Congreve Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Narrow lane (<3.0m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 312 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Congreve Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Chaucer Place: 50 km/h (proposed 30 km/h) Meredith Street: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Congreve Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.2 For urban areas this corresponds to an IRR band of **Medium**.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Congreve Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Conrad Drive (Meadowbank)</u>

The speed limit on Conrad Drive, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Conrad Drive connects to Kelvin Road to the west and terminates at a dead end to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Conrad Drive is classified as an access road under the one network road classification (ONRC). Conrad Drive is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Conrad Drive were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 150 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Conrad Drive has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Kelvin Road: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Conrad Drive has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Conrad Drive, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Corinth Street (Remuera)

The speed limit on Corinth Street, Remuera has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Corinth Street connects to Meadowbank Road to the east and to Waiatarua Road to the west. This road provides access to residential properties and is approximately 0.3 km in length.
	Corinth Street is classified as an access road under the one network road classification (ONRC). Corinth Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Corinth Street were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 936 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Corinth Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Meadowbank Road: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Corinth Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Corinth Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Cotton Place (Opaheke)

The speed limit on Cotton Place, Opaheke, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Cotton Place connects to Tasman Drive to the south and terminates at a cul-de-sac to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Cotton Place is classified as an access road under the one network road classification (ONRC). Cotton Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Cotton Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 490 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Cotton Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Tasman Drive: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Cotton Place has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.82 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Cotton Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Cox Street (Ponsonby)</u>

The speed limit on Cox Street, Ponsonby, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Cox Street connects to Wharf Road to the east and to Hector Street to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Cox Street is classified as an access road under the one network road classification (ONRC). Cox Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Cox Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to <3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 110 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Cox Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Hector Street: 50km/h (proposed 30km/h) • Wharf Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Cox Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 2.06 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Cox Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Crowther Street (Blockhouse Bay)

The speed limit on Crowther Street, Blockhouse Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Crowther Street connects to Wolverton Street to the north and Busby Street to the south. This road provides access to residential properties and is approximately 0.3 km in length.
	Crowther Street is classified as an access road under the one network road classification (ONRC). Crowther Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Crowther Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 728 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Crowther Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Falkirk Street: 50 km/h (proposed 30 km/h) • Crowther Street: 50 km/h (proposed 30 km/h) • Ulster Road: 50 km/h (proposed 30 km/h) • Taylor Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Crowther Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Crowther Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Cutfield Lane (Kumeu)</u>

The speed limit on Cutfield Lane, Kumeu, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Cutfield Lane connects to Lewis Younie Road to the north and to Madden Avenue to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Cutfield Lane is classified as an access road under the one network road classification (ONRC). Cutfield Lane is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Cutfield Lane were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was estimated from MegaMaps as 250 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Cutfield Lane has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Lewis Younie Road: 50km/h (proposed 30km/h) • Madden Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Cutfield Lane has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.75 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Cutfield Lane, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Delphine Close (Mount Albert)</u>

The speed limit on Delphine Close, Mount Albert, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Delphine Close connects to Lorraine Avenue to the west and terminates at a hammerhead to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Delphine Close is classified as an access road under the one network road classification (ONRC). Delphine Close is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Delphine Close were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 260 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Delphine Close has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Lorraine Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Delphine Close has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Delphine Close, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Denize Road (Wesley)

The speed limit on Denize Road, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Denize Road connects to Farrelly Avenue to the north and to Stoddard Road to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Denize Road is classified as a secondary collector road under the one network road classification (ONRC). Denize Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were one minor injury crash and one non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Denize Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,983 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Denize Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Farrelly Avenue: 50km/h (proposed 30km/h) • Stoddard Road: 50km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Denize Road has the following information:

- o Collective Risk band of **Medium**, and a Personal Risk band of **Medium-High**.
- The Infrastructure Risk Rating Score is 2.49 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Denize Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Disraeli Street (Epsom)</u>

The speed limit on Disraeli Street, Epsom has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Disraeli Street is classified as a secondary collector road under the one network road classification (ONRC). Disraeli Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
	Disraeli Street connects to Mount Eden Road to the west and St Andrews Road to the east. This road provides access to residential properties. It is approximately 0.7 km in length.
(d) crash risk for all road users; and	From NZTA's MegaMaps tool there is a total of zero recorded crashes in the last five years.
(e) the characteristics of the road and roadsides; and	The following characteristics for Disraeli Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and very wide shoulder (>2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 804 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	Disraeli Street has a mean operating speed in the range of <30km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are:
	 Mount Eden Road: 50 km/h St Andrews Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Disraeli Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.05 For urban areas this corresponds to an IRR band of **Medium**

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit = 50km/h

Proposed safe and appropriate speed limit recommendation = 30 km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Disraeli Street, the actual operating speeds from the megamaps tool are: < 30km/h

Speed Limit Review - Douglas Road (Mount Eden)

The speed limit on Douglas Road, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Douglas Road connects to Ruapehu Street to the east and terminates at a dead end to the west. This road provides access to residential properties and is approximately 0.2 km in length.
	Douglas Road is classified as an access road under the one network road classification (ONRC). Douglas Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Douglas Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 728 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Douglas Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Ruapehu Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Douglas Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.79 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Douglas Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Dover Place (Remuera)

The speed limit on Dover Place, Remuera has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Dover Place connects to Waiatarua Road to the east and terminate at a cul-de-sac to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Dover Place is classified as an access road under the one network road classification (ONRC). Dover Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Dover Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 150 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Dover Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Waiatarua Road: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Dover Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.44 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Dover Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Dromorne Road (Remuera)

The speed limit on Dromorne Road, Remuera has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Dromorne Road connects to Omahu Road to the west and Armadale Road to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Dromorne Road is classified as a secondary collector road under the one network road classification (ONRC). Dromorne Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Dromorne Road were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,230 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Dromorne Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Armadale Road: 50km/h (proposed 30km/h) • Omahu Road: 50km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Dromorne Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.05 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Dromorne Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Dunbar Road (Mount Eden)

The speed limit on Dunbar Road, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Dunbar Road connects to Dominion Road to the east and to Eldo Road to the west. This road provides access to residential propertion and is approximately 0.3 km in length.
	Dunbar Road is classified as an access road under the one network road classification (ONRC). Dunbar Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were two non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Dunbar Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 693 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

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Step 2: Determine the road safety metrics and IRR score

From MegaMaps Dunbar Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Dunbar Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Dunstan Place (Otara)

The speed limit on Dunstan Place, Otara, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Dunstan Place connects to Haumia Way to the south and terminates at a cul-de-sac to the north. This road provides access to residential properties and is approximately 0.3 km in length.
	Dunstan Place is classified as an access road under the one network road classification (ONRC). Dunstan Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Dunstan Place were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Curved • Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 330 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Dunstan Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Haumia Way: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Dunstan Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.17 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Dunstan Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Eastdale Road (Avondale)

The speed limit on Eastdale Road, Avondale has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Eastdale Road connects to Rosebank Road to the west and Holly Street to the east. This road provides access to residential properties and is approximately 0.6 km in length.
	Eastdale Road is classified as a secondary collector road under the one network road classification (ONRC). Eastdale Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020. These were all non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Eastdale Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2080 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Eastdale Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Holly Street: 50 km/h (proposed 30 km/h) • Malroy Street: 50 km/h (proposed 30 km/h) • Lidcombe Place: 50 km/h (proposed 30 km/h) • Rosebank Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Eastdale Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.21. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Eastdale Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review –</u> Eldon Road (Mount Eden)

The speed limit on Eldon Road, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Eldon Road connects to St Albans Avenue to the north and to Balmoral Road to the south. This road provides access to residential properties and is approximately 0.5 km in length.
	Eldon Road is classified as a secondary collector road under the one network road classification (ONRC). Eldon Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were two non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Eldon Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2,185 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Eldon Road has a mean operating speed in the range of <30 km/h.
	Note that Eldon Road has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • St Albans Avenue: 50 km/h (proposed 30km/h) • Cambourne Road: 50 km/h (proposed 30km/h) • Brixton Road: 50 km/h (proposed 30km/h) • Dunbar Road: 50 km/h (proposed 30km/h) • Balmoral Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Eldon Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.22 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Eldon Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Elizabeth Street (Mount Eden)</u>

The speed limit on Elizabeth Street, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Elizabeth Street connects to Dominion Road to the east and to Gribblehirst Road to the west. This road provides access to residential properties and is approximately 0.4 km in length.
	Elizabeth Street is classified as a secondary collector road under the one network road classification (ONRC). Elizabeth Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Elizabeth Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 739 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Elizabeth Street has a mean operating speed in the range of <30 km/h.
	Note that Elizabeth Street has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are:
	 Gribblehirst Road: 50 km/h (proposed 30km/h) Tanekaha Street: 50 km/h (proposed 30km/h) Dominion Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Elizabeth Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.55 For urban areas this corresponds to an IRR band of Low.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Elizabeth Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Ellerton Road (Mount Eden)</u>

The speed limit on Ellerton Road, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

	<u>, </u>
Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero
	Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Ellerton Road connects to Kingsford Road to the west and to Mount Eden Road to the east. This road provides access to residential properties and is approximately 0.6 km in length.
	Ellerton Road is classified as a primary collector road under the one network road classification (ONRC). Ellerton Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were one minor injury crash and one non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Ellerton Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	From MegaMaps tool:
, ,	 Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,144 vehicles per day (vpd).
	This is inconsistent with the primary collector classification under ONRC and suggests the actual function of the road is more in line with a secondary collector.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Ellerton Road has a mean operating speed in the range of <30 km/h.
	Note that Ellerton Road has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Kingsford Road: 50 km/h (proposed 30km/h) • Mount Eden Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Ellerton Road has the following information:

- o Collective Risk band of **Low-Medium**, and a Personal Risk band of **Medium-High**.
- The Infrastructure Risk Rating Score is 1,70 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Ellerton Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Eric Farley Drive (Kumeu)

The speed limit on Eric Farley Drive, Kumeu, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Eric Farley Drive connects to Matua Road to the north and to Van Rixel Drive to the south. This road provides access to residential properties and is approximately 0.3 km in length.
	Eric Farley Drive is classified as an access road under the one network road classification (ONRC). Eric Farley Drive is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Eric Farley Drive were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 From MegaMaps tool: Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was estimated from MegaMaps as 250 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Eric Farley Drive has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Matua Road: 50km/h • Korako Drive: 50km/h (proposed 30km/h) • Van Rixel Drive: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Eric Farley Drive has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.75 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Eric Farley Drive, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Erin Street (Epsom)

The speed limit on Erin Street, Epsom has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Erin Street connects to Great South Road to the north and to Clyde Street to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Erin Street is classified as a secondary collector road under the one network road classification (ONRC). Erin Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were two non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Erin Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Commercial Big Box/industrial using MegaMaps tool. The IRR defines Commercial Big Box/industrial as "Large (big box) shops and/or industry/factories with intermittent large accessways and intersections leading to large car parking areas. Regular

Requirement	Comments
	intersections and smaller accesses are also likely to be present. Some pedestrian and cyclist activity may be present."
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 5 to <10+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,248 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Erin Street has a mean operating speed in the range of <30 km/h.
	Note that Erin Street has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Great South Road: 50 km/h • Clyde Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Erin Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.78 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Erin Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Falkirk Street (Blockhouse Bay)

The speed limit on Falkirk Street, Blockhouse Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Falkirk Street connects to Swinburne Street to the south and Busby Street to the north. This road provides access to residential properties and is approximately 0.3 km in length.
	Falkirk Street is classified as an secondary collector road under the one network road classification (ONRC). Falkirk Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Falkirk Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 728 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Falkirk Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Swinburne Street: 50 km/h (proposed 30 km/h) • Busby Street: 50 km/h (proposed 30 km/h) • Ulster Road: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Falkirk Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.32 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Falkirk Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Fancourt Street (Meadowbank)</u>

Fancourt Street, Meadowbank, is divided into two sections as outlined below:

Section 1: Fancourt Street between Harapaki Road and Parsons Road

Section 2: Fancourt Street between Parsons Road and Blackett Crescent.

The speed limit on Fancourt Street, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments	
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transp Management Guide 2016 Infrastructure Risk Rating NZTA MegaMaps tool Auckland Transport Vision Refer to the Process Summary for	Manual 2016 (IRR)
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management G consideration of the speed limit.	Guide was used for the review and
(c) the function and use of the road; and		paki Road to the northwest and to est. This road provides access to eximately 0.8 km in length.
	network road classification (ONR	an access road under the one C). Fancourt Street is a two-way, are pedestrian amenities and onere are no cyclist amenities.
(d) crash risk for all road users; and	s; NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.	
(e) the characteristics of the	Section 1:	Section 2:
road and roadsides; and	The following characteristics for Fancourt Street were determined using MegaMaps tool.	The following characteristics for Fancourt Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to 	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to

Requirement	Comments	
	3.5m) and very narrow shoulder (0m to <0.5m) • Roadside hazards (in both directions): Severe and Moderate	3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	MegaMaps tool. The IRR defines by housing with frequent drivewa intersections and accesses are	ified as Urban Residential using Urban Residential as "dominated ys and on street parking. Regular present. Pedestrian and cyclist ent, particularly at certain times of
(g) the number of intersections and property accessways; and	From MegaMaps tool: • Intersection density: 5 to • Access density: 20+ acc	o <10 intersections per km esses per km
(h) traffic volume; and	Average daily traffic (ADT) was de vehicles per day (vpd).	etermined from MegaMaps as 535
(i) any planned modification to the road; and	There are no planned modification	ns at this time.
(j) the views of interested persons and groups.	Central government policy is to adjacent to urban schools.	implement 30km/h speed limits
	Key stakeholders have indicated 30km/h speed limits around urban	general support for implementing schools.
		esidents shows 78% support for ols, kindergartens and community

Table 2: Additional Relevant Factors

AT also had regard to		
Current speed limit	The existing speed limit is 50 km/h.	
MegaMaps Mean Operating Speed (km/h)	Fancourt Street has a mean operating speed in the range of <30 km/h.	
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Harapaki Road: 50 km/h (proposed 30km/h) • Temple Street: 50 km/h (proposed 30km/h) • Meyrick Place: 50 km/h (proposed 30km/h) • Parsons Road: 50 km/h (proposed 30km/h)\ • Appleyard Crescent: 50 km/h (proposed 30km/h) • Blackett Crescent: 50 km/h (proposed 30km/h)	

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Fancourt Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is:
 Section 1: 2.41 For urban areas this corresponds to an IRR band of Medium-High.
 Section 2: 1.90 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h for both sections.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Fancourt Street, the actual operating speed from the MegaMaps tool is: <30 for both sections.

Speed Limit Review - Farrelly Avenue (Wesley)

The speed limit on Farrelly Avenue, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments	
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.	
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.	
(c) the function and use of the road; and	Farrelly Avenue connects to Sandringham Road to the southeast and to O'Donnell Avenue to the north. This road provides access to residential properties and is approximately 0.8 km in length.	
	Farrelly Avenue is classified as a secondary collector road under the one network road classification (ONRC). Farrelly Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.	
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records four crashes between 2016 and 2020. These were one minor injury crash and three non-injury crashes.	
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.	
(e) the characteristics of the road and roadsides; and	The following characteristics for Farrelly Avenue were determined using MegaMaps tool.	
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate 	
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"	

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,221 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Farrelly Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Sandringham Road: 50km/h Potter Avenue: 50km/h (proposed 30km/h) Christini Street: 50km/h (proposed 30km/h) Betts Avenue: 50km/h (proposed 30km/h) Hedley Road: 50km/h (proposed 30km/h) Denize Road: 50km/h (proposed 30km/h) Jessop Street: 50km/h (proposed 30km/h) Parkinson Avenue: 50km/h (proposed 30km/h) O'Donnell Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Farrelly Avenue has the following information:

- o Collective Risk band of **Low-Medium**, and a Personal Risk band of **Medium-High**.
- The Infrastructure Risk Rating Score is 2.49 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Farrelly Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Fletcher Street (Wesley)</u>

The speed limit on Fletcher Street, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments	
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.	
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.	
(c) the function and use of the road; and	Fletcher Street connects to O'Donnell Avenue to the south and terminates at a cul-de-sac to the north. This road provides access to residential properties and is approximately 0.1 km in length.	
	Fletcher Street is classified as an access road under the one network road classification (ONRC). Fletcher Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.	
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.	
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.	
(e) the characteristics of the road and roadsides; and	The following characteristics for Fletcher Street were determined using MegaMaps tool.	
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate 	
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"	

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 100 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Fletcher Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: O'Donnell Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Fletcher Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.44 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Fletcher Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Francis Ryan Close (Mount Albert)

The speed limit on Francis Ryan Close, Mount Albert has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments	
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.	
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.	
(c) the function and use of the road; and	Francis Ryan Close connects to Alexis Avenue to the northeast and terminates in a cul-de-sac to southwest. This road provides access to residential properties and is approximately 0.1 km in length.	
	Francis Ryan Close is classified as an access road under the one network road classification (ONRC). Francis Ryan Close is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.	
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.	
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.	
(e) the characteristics of the road and roadsides; and	The following characteristics for Francis Ryan Close were determined using MegaMaps tool.	
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate 	
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"	

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 200 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Francis Ryan Close has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Alexis Avenue: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Francis Ryan Close has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.18 For urban areas this corresponds to an IRR band of **Medium**.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Francis Ryan Close, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Fred White Drive (Kumeu)</u>

The speed limit on Fred White Drive, Kumeu, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Fred White Drive connects to Gilbransen Road to the west and to Korako Drive to the north. This road provides access to residential properties and is approximately 0.2 km in length.
	Fred White Drive is classified as an access road under the one network road classification (ONRC). Fred White Drive is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all
(e) the characteristics of the road and roadsides; and	road users were considered. The following characteristics for Fred White Drive were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Curved • Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was estimated from MegaMaps as 250 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Fred White Drive has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Gilbransen Road: 50km/h (proposed 30km/h) • Korako Drive: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Fred White Drive has the following information:

- $\circ\quad$ Collective Risk band of $\boldsymbol{\text{Low}},$ and a Personal Risk band of $\boldsymbol{\text{Low}}.$
- The Infrastructure Risk Rating Score is 2.75 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Fred White Drive, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Galbraith Street (Wesley)

The speed limit on Galbraith Street, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Galbraith Street connects to Skeates Avenue to the north and terminates at a cul-de-sac to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Galbraith Street is classified as an access road under the one network road classification (ONRC). Galbraith Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Galbraith Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 750 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Galbraith Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Skeates Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Galbraith Street has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Galbraith Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Garry Road (Mount Eden)

The speed limit on Garry Road, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Garry Road is classified as an access road under the one network road classification (ONRC). Garry Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
	Garry Road connects to Disraeli Street to the northeast and terminate at a dead end to the southwest. This road provides access to residential properties. It is approximately 0.1 km in length.
(d) crash risk for all road users; and	From NZTA's MegaMaps tool there is a total of zero recorded crashes in the last five years.
(e) the characteristics of the road and roadsides; and	The following characteristics for Garry Road were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: Medium lane (3.0 to 3.5 m) and very narrow shoulder (0m to <0.5m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 150 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	Garry Road has a mean operating speed in the range of <30km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Disraeli Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Garry Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit = 50km/h

Proposed safe and appropriate speed limit recommendation = 30 km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Garry Road, the actual operating speeds from the megamaps tool are: < 30km/h

Speed Limit Review – George Street (Newmarket)

The speed limit on George Street, Newmarket, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	George Street connects to Parnell Road to the east and to Carlton Gore Road to the west. This road provides access to a mix of residential properties, commercial properties and the Auckland Domain and is approximately 0.6 km in length.
	George Street is classified as an arterial road under the one network road classification (ONRC). George Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for George Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to <3.5m) and wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Commercial Big Box/industrial using MegaMaps tool. The IRR defines Commercial Big Box/industrial as "Large (big box) shops and/or industry/factories with intermittent large accessways and intersections leading to large car parking areas. Regular intersections and smaller accesses are also likely to be present. Some pedestrian and cyclist activity may be present."

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 5 to <10 accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 4,093 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of George Street has a mean operating speed in the range of 30 km/h to <35 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Carlton Gore Road: 50km/h Morgan Street: 50km/h (proposed 30km/h) Titoki Street: 50km/h (proposed 30km/h) Parnell Road: 50km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps George Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 1.97 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 50 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 50km/h as the safe and appropriate speed for George Street, the actual operating speed from the MegaMaps tool is: 31 km/h.

Speed Limit Review - Gilbransen Road (Kumeu)

The speed limit on Gilbransen Road, Kumeu, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Gilbransen Road connects to Matua Road to the north and terminates at a cul-de-sac to the south. This road provides access to residential properties and is approximately 0.5 km in length.
	Gilbransen Road is classified as an access road under the one network road classification (ONRC). Gilbransen Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Gilbransen Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: narrow lane (<3.0m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 10 to <20 accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 371 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Gilbransen Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	 Matua Road: 50km/h Lewis Younie Road: 50km/h (proposed 30km/h) Korako Drive: 50km/h (proposed 30km/h) Fred White Drive: 50km/h (proposed 30km/h) Madden Avenue: 50km/h (proposed 30km/h) Van Rixel Drive: 50km/h (proposed 30km/h) Lockyer Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Gilbransen Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.41 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Gilbransen Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Goring Road (Sandringham)

The speed limit on Goring Road, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Goring Road connects to Cambourne Road to the north and to Balmoral Road to the south. This road provides access to residential properties and is approximately 0.4 km in length.
	Goring Road is classified as a secondary collector road under the one network road classification (ONRC). Goring Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Goring Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 840 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Goring Road has a mean operating speed in the range of <30 km/h.
	Note that Goring Road has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Cambourne Road: 50 km/h (proposed 30km/h) Truro Road: 50 km/h (proposed 30km/h) Lancing Road: 50 km/h (proposed 30km/h) Balmoral Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Goring Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.44 For urban areas this corresponds to an IRR band of **Medium-High**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Goring Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Greenhaven Avenue (Opaheke)</u>

The speed limit on Greenhaven Avenue, Opaheke, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Greenhaven Avenue connects to Short Street to the north and to Boundary Road to the south. This road provides access to residential properties and is approximately 0.6 km in length.
	Greenhaven Avenue is classified as an access road under the one network road classification (ONRC). Greenhaven Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Greenhaven Avenue were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 490 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Greenhaven Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Boundary Road: 50km/h Tasman Drive: 50km/h (proposed 30km/h) Short Street: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Greenhaven Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.82 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Greenhaven Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Gribblehirst Road (Sandringham)

The speed limit on Gribblehirst Road, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Gribblehirst Road connects to Elizabeth Street to the east and to Sandringham Road to the west. This road provides access to residential properties and is approximately 0.4 km in length.
	Gribblehirst Road is classified as a secondary collector road under the one network road classification (ONRC). Gribblehirst Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Gribblehirst Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,040 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Gribblehirst Road has a mean operating speed in the range of <30 km/h.
	Note that Gribblehirst Road has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Elizabeth Street: 50 km/h (proposed 30km/h)
	 King Edward Street: 50 km/h (proposed 30km/h) Sandringham Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Gribblehirst Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.06 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Gribblehirst Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Halesowen Avenue (Mount Eden)</u>

The speed limit on Halesowen Avenue, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero
	Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Halesowen Avenue connects to Sandringham Road to the west and Dominion Road to the east. This road provides access to residential properties and is approximately 0.8 km in length.
	Halesowen Avenue is classified as a secondary collector road under the one network road classification (ONRC). Halesowen Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. One minor injury and one non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Halesowen Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,427 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Halesowen Avenue has a mean operating speed in the range of <30 km/h.
	This road has a number of traffic control devices (speed humps) providing traffic calming. The impact of these is already reflected in the operating speed set out above.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Sandringham Road: 50 km/h • Arabi Street: 50 km/h (proposed 30km/h) • Pine Street: 50 km/h (proposed 30km/h) • Dominion Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Halesowen Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Medium
- The Infrastructure Risk Rating Score is 1.70 For urban areas this corresponds to an IRR band of **Low-Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Halesowen Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Halston Road (Mount Eden)

The speed limit on Halston Road, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Halston Road connects to Dominion Road to the west and to Matipo Street to the east. This road provides access to residential properties and is approximately 0.4 km in length.
	Halston Road is classified as an access road under the one network road classification (ONRC). Halston Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all
	road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Halston Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 832 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Halston Road has a mean operating speed in the range of <30 km/h.
	Note that Halston Road has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Dominion Road: 50 km/h • Matipo Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Halston Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.79 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Halston Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Hanover Place (Pahurehure)

The speed limit on Hanover Place, Pahurehure, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Hanover Place connects to Ray Small Drive to the northwest and terminates at a cul-de-sac to the southeast. This road provides access to residential properties and is approximately 0.3 km in length.
	Hanover Place is classified as an access road under the one network road classification (ONRC). Hanover Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Hanover Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,684 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Hanover Place has a mean operating speed in the range of 30 km/h to <35km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Ray Small Drive: 50km/h Clark Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Hanover Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.75 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Hanover Place, the actual operating speed from the MegaMaps tool is: 30 km/h.

<u>Speed Limit Review – Harapaki Road (Meadowbank)</u>

The speed limit on Harapaki Road, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Harapaki Road connects to Meadowbank Road to the west and to Temple Street to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Harapaki Road is classified as a secondary collector road under the one network road classification (ONRC). Harapaki Road is a twoway, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020. These were one serious injury crash, one minor injury crash, and one non-injury crash.
	This resulted in one Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Harapaki Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist

Requirement	Comments
	activity are also likely to be present, particularly at certain times of the day"
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1664 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Harapaki Road has a mean operating speed in the range of 30 km/h to <35 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Meadow Ban Road: 50 km/h (proposed 30km/h) • Temple Street: 50 km/h (proposed 30km/h) • Fancourt Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Harapaki Road has the following information:

- o Collective Risk band of **Low-Medium**, and a Personal Risk band of **Medium-High**.
- The Infrastructure Risk Rating Score is 2.30 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Harapaki Road, the actual operating speed from the MegaMaps tool is: 33 km/h.

Speed Limit Review - Hasbury Avenue (Epsom)

The speed limit on Hasbury Avenue, Epsom has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Hasbury Avenue is classified as an access road under the one network road classification (ONRC). Hasbury Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
	Hasbury Avenue connects to Disraeli Street to the north and Windmill Road to the south. This road provides access to residential properties. It is approximately 0.2 km in length.
(d) crash risk for all road users; and	From NZTA's MegaMaps tool there is a total of zero recorded crashes:
(e) the characteristics of the road and roadsides; and	The following characteristics for Hasbury Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and very wide shoulder (>2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 676 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	Hasbury Avenue has a mean operating speed in the range of <30km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are:
	 Disraeli Street: 50 km/ h (proposed 30 km/h) Windmill Road: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Hasbury Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.79 For urban areas this corresponds to an IRR band of Low-Medium

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit = 50km/h

Proposed safe and appropriate speed limit recommendation = 30 km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Hasbury Avenue, the actual operating speeds from the megamaps tool are: < 30km/h

Speed Limit Review – Haumia Way (Otara)

The speed limit on Haumia Way, Otara, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Haumia Way connects to Dawson Road at both ends, forming a lopp to the northeastern side of Dawson Road. This road provides access to residential properties and is approximately 0.4 km in length.
	Haumia Way is classified as an access road under the one network road classification (ONRC). Haumia Way is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Haumia Way were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Curved • Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 330 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Haumia Way has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Haumia Way: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Haumia Way has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.17 For urban areas this corresponds to an IRR band of **Medium**.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Haumia Way, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Hector Street (Ponsonby)</u>

The speed limit on Hector Street, Ponsonby, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Hector Street connects to Cox Street to the north and terminates at a dead end to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Hector Street is classified as an access road under the one network road classification (ONRC). Hector Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Hector Street were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to <3.5m) and narrow shoulder (0.5m to <1.0m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 110 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Hector Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Cox Street: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Hector Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 2.06 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Hector Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Hedley Road (Wesley)

The speed limit on Hedley Road, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Hedley Road connects to Farrelly Avenue to the southwest and to Potter Avenue to the northeast. This road provides access to residential properties and is approximately 0.2 km in length.
	Hedley Road is classified as an access road under the one network road classification (ONRC). Hedley Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Hedley Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 750 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Hedley Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Farrelly Avenue: 50km/h (proposed 30km/h) • Shearer Street: 50km/h (proposed 30km/h) • Potter Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Hedley Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Hedley Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Highbury Street (Avondale)

The speed limit on Highbury Street, Avondale has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Highbury Street connects to Victor Street to the north and Ash Street to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Highbury Street is classified as an access road under the one network road classification (ONRC). Highbury Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Highbury Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 150 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Highbury Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Ash Street: 50 km/h • Victor Street: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Highbury Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Highbury Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Highcliffe Road (Mount Eden)</u>

The speed limit on Highcliffe Road, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Highcliffe Road connects to Calgary Street to the north and Lambeth Road to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Highcliffe Road is classified as an access road under the one network road classification (ONRC). Highcliffe Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Highcliffe Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 390 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Highcliffe Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Calgary Street: 50 km/h (proposed 30km/h) Wembley Road: 50 km/h (proposed 30km/h) Lambeth Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Highcliffe Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.79 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Highcliffe Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Holdsworth Avenue (Wesley)</u>

The speed limit on Holdsworth Avenue, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Holdsworth Avenue connects to O'Donnell Avenue to the east and to Potter Avenue to the west. This road provides access to residential properties and is approximately 0.2 km in length.
	Holdsworth Avenue is classified as an access road under the one network road classification (ONRC). Holdsworth Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Holdsworth Avenue were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 750 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Holdsworth Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: O'Donnell Avenue: 50km/h (proposed 30km/h) Skeates Avenue: 50km/h (proposed 30km/h) Potter Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Holdsworth Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Holdsworth Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Holly Street (Avondale)

The speed limit on Holly Street, Avondale has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Holly Street connects to Eastdale Road to the north and Victor Street to the south. This road provides access to residential properties and is approximately 1 km in length.
	Holly Street is classified as a secondary collector road under the one network road classification (ONRC). Holly Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records five crashes between 2016 and 2020. 1 serious, 1 minor and 3 non-injury crashes.
	This resulted in one Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Holly Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Winding Carriageway width: Medium lane (3.0m to 3.5m) and wide shoulder (1m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 2 to <3 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2090 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Holly Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Victor Street: 50 km/h (proposed 30 km/h) • Colorado Place: 50 km/h (proposed 30 km/h) • Eastdale Road: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Holly Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium**
- The Infrastructure Risk Rating Score is 2.27. For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Holly Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Hukanui Crescent (Ponsonby)</u>

The speed limit on Hukanui Crescent, Ponsonby, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Hukanui Crescent connects to Parawai Crescent to the west and to Kelmarna Avenue to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Hukanui Crescent is classified as a primary collector road under the one network road classification (ONRC). Hukanui Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
	Note that Hukanui Crescent is classed as primary collector due to the high volume of traffic using the road, however the design and operating speed of the road is more consistent with a secondary collector function.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020. These were three non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Hukanui Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to <3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular

Requirement	Comments
	intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"
(g) the number of intersections	From MegaMaps tool:
and property accessways; and	 Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 9,360 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Hukanui Crescent has a mean operating speed in the range of 30 km/h to <35 km/h.
	Note that Hukanui Crescent has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Kelmarna Avenue: 50km/h (proposed 30km/h) • Parawai Crescent: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Hukanui Crescent has the following information:

- $\circ\quad$ Collective Risk band of $\boldsymbol{\mathsf{Low}},$ and a Personal Risk band of $\boldsymbol{\mathsf{Low}},$
- The Infrastructure Risk Rating Score is 2.00 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 50 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 50km/h as the safe and appropriate speed for Hukanui Crescent, the actual operating speed from the MegaMaps tool is: 31 km/h.

Speed Limit Review - Jason Avenue (Sandringham)

The speed limit on Jason Avenue, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Jason Avenue connects to Sandringham Road to the west and Arabi Street to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Jason Avenue is classified as a secondary collector road under the one network road classification (ONRC). Jason Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Jason Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Narrow lane (<3.0m) and very narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 520 vehicles per day (vpd). This level of traffic volume suggests Jason Ave operates as an access road, not the secondary collector function as recorded in megamaps.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Jason Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Sandringham Road: variable school zone 40 kmh/50 km/h • Arabi Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Jason Avenue has the following information:

- o Collective Risk band of Low-Medium, and a Personal Risk band of Medium
- The Infrastructure Risk Rating Score is 2.20 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Jason Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Jessop Street (Wesley)</u>

The speed limit on Jessop Street, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Jessop Street connects to Farrelly Avenue to the east and terminates at a cul-de-sac to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Jessop Street is classified as an access road under the one network road classification (ONRC). Jessop Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Jessop Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 200 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Jessop Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Farrelly Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Jessop Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Jessop Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Joyce Street (Pahurehure)

The speed limit on Joyce Street, Pahurehure, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Joyce Street connects to Clark Road to the south and terminates at a hammerhead to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Joyce Street is classified as an access road under the one network road classification (ONRC). Joyce Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Joyce Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 40 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Joyce Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Clark Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Joyce Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.82 For urban areas this corresponds to an IRR band of Low-Medium.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Joyce Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Kapua Street (Meadowbank)</u>

The speed limit on Kapua Street, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Kapua Street connects to Tahapa Crescent to the south and terminates at a cul-de-sac to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Kapua Street is classified as an access road under the one network road classification (ONRC). Kapua Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Kapua Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 321 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Kapua Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Tahapa Crescent: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kapua Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.32 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Kapua Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Kashmir Road (Glen Eden)

The speed limit on Kashmir Road, Glen Eden, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Kashmir Road connects to Nandana Drive to the north and to Withers Road to the south. This road provides access to residential properties and is approximately 0.4 km in length.
	Kashmir Road is classified as an access road under the one network road classification (ONRC). Kashmir Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Kashmir Road were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1953 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Kashmir Road has a mean operating speed in the range of 30km/h to <35km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Nandana Drive: 50km/h (proposed 30km/h) Tagor Street: 50km/h (proposed 30km/h) Withers Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kashmir Road has the following information:

- o Collective Risk band of Low-Medium, and a Personal Risk band of Medium.
- The Infrastructure Risk Rating Score is 2.30 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Kashmir Road, the actual operating speed from the MegaMaps tool is: 32 km/h.

<u>Speed Limit Review - Kaurimu Rise (Titirangi)</u>

The speed limit on Kaurimu Rise, Titirangi, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Kaurimu Rise connects to Wirihana Road to the north and terminates at a loop to south. This road provides access to residential properties and is approximately 0.1 km in length.
	Kaurimu Rise is classified as an access road under the one network road classification (ONRC). Kaurimu Rise is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Kaurimu Rise were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: narrow lane (<3.0m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 100 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Kaurimu Rise has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Wirihana Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kaurimu Rise has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 2.46 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Kaurimu Rise, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Keats Place (Blockhouse Bay)

The speed limit on Keats Place, Blockhouse Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Keats Place connects to Marlowe Road to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Keats Place is classified as an access road under the one network road classification (ONRC). Keats Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Keats Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 250 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Keats Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Marlowe Road: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Keats Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.06 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Keats Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Keith Avenue (Remuera)

The speed limit on Keith Avenue, Remuera has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments	
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information. 	
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.	
(c) the function and use of the road; and	Keith Avenue connects to Waiatarua Road to the west and terminates at a dead end to the east. This road provides access to residential properties and is approximately 0.1 km in length.	
	Keith Avenue is classified as an access road under the one network road classification (ONRC). Keith Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.	
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all	
(e) the characteristics of the road and roadsides; and	road users were considered. The following characteristics for Keith Avenue were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) • Roadside hazards (in both directions): Severe and Moderate	
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"	

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 260 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Keith Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Waiatarua Road: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Keith Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.90 For urban areas this corresponds to an IRR band of Low-Medium.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Keith Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Kelmarna Avenue (Ponsonby)</u>

The speed limit on Kelmarna Avenue, Ponsonby, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments	
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.	
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.	
(c) the function and use of the road; and	Kelmarna Avenue connects to Jervois Road to the north and to Hukanui Crescent to the south. This road provides access to residential properties and is approximately 0.6 km in length.	
	Kelmarna Avenue is classified as a primary collector road under the one network road classification (ONRC). Kelmarna Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.	
	Note that Kelmarna Avenue is classed as primary collector due to the high volume of traffic using the road, however the design and operating speed of the road is more consistent with a secondary collector function.	
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records six crashes between 2016 and 2020. These were one minor injury crash and five non-injury crashes.	
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.	
(e) the characteristics of the road and roadsides; and	The following characteristics for Kelmarna Avenue were determined using MegaMaps tool.	
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to <3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate 	
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated"	

Requirement	Comments
	by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"
(g) the number of intersections	From MegaMaps tool:
and property accessways; and	 Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 4,558 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Kelmarna Avenue has a mean operating speed in the range of 30 km/h to <35 km/h. Note that Kelmarna Avenue has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Jervois Road: 50km/h • Buller Street: 50km/h (proposed 30km/h) • Trinity Street: 50km/h (proposed 30km/h) • Hukanui Crescent: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kelmarna Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 1.81 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 50 km/h

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 50km/h as the safe and appropriate speed for Kelmarna Avenue, the actual operating speed from the MegaMaps tool is: 30 km/h.

Speed Limit Review - Kelvin Road (Remuera)

The speed limit on Kelvin Road, Remuera has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments	
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.	
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.	
(c) the function and use of the road; and	Kelvin Road connects to Remuera Road to the south and terminates at a dead end to the north. This road provides access to residential properties and is approximately 0.6 km in length.	
	Kelvin Road is classified as a secondary collector road under the one network road classification (ONRC). Kelvin Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.	
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020. These were two minor injury crashes and one non-injury crash.	
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.	
(e) the characteristics of the road and roadsides; and	The following characteristics for Kelvin Road were determined using MegaMaps tool.	
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate 	
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"	

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,508 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to		
Current speed limit	The existing speed limit is 50 km/h.	
MegaMaps Mean Operating Speed (km/h)	This section of Kelvin Road has a mean operating speed in the range of <30 km/h.	
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Conrad Drive: 50 km/h (proposed 30km/h) Remuera Road: 50km/h	

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kelvin Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.81 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Kelvin Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Kensington Avenue (Mount Eden)

Kensington Avenue, Mount Eden, is divided into two sections as outlined below:

Section 1: Kensington Avenue between Dominion road and Matipo Street

Section 2: Kensington Avenue between Mapito Street and Kingsford Road

The speed limit on Kensington Avenue, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Step 1: Determine the base information

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments	
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.	
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.	
(c) the function and use of the road; and	Kensington Avenue connects to Dominion Road to the west and to Kingsford Road to the east. This road provides access to residential properties and is approximately 0.6 km in length.	
	Kensington Avenue (section 1) is classified as a secondary collector road under the one network road classification (ONRC). Kensington Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities. Kensington Avenue (section 2) is classified as a primary collector road under the one network road classification (ONRC). Kensington Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.	
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.	
(e) the characteristics of the road and roadsides; and	The following characteristics for Kensington Avenue were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) • Roadside hazards (in both directions): Severe and Moderate	

Requirement	Comments	
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"	
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km	
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,144 vehicles per day (vpd).	Average daily traffic (ADT) was determined from MegaMaps as 2,600 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.	
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.	
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.	
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".	

Table 2: Additional Relevant Factors

AT also had regard to		
Current speed limit	The existing speed limit is 50 km/h.	
MegaMaps Mean Operating Speed (km/h)	Both sections of Kensington Avenue have mean operating speeds in the range of <30 km/h.	
	Note that Kensington Avenue has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.	
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Dominion Road: 50 km/h Matipo Street: 50 km/h (proposed 30km/h) Kingsford Road: 50 km/h (proposed 30km/h)	

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kensington Avenue has the following information: (for both sections)

o Collective Risk band of **Low**, and a Personal Risk band of **Low**.

 The Infrastructure Risk Rating Score is 1.94 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is,

for section 1: 40 km/h. for section 2: 50km/h

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h & 50km/h as the safe and appropriate speeds for the two sections of Kensington Avenue, the actual operating speeds from the MegaMaps tool are: <30 km/h.

<u>Speed Limit Review - Keppell Street (Grey Lynn)</u>

The speed limit on Keppell Street, Grey Lynn has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Keppell Street connects to King Street to the west and Kirk Street to the east. This road provides access to residential properties and is approximately 0.4 km in length.
	Keppell Street is classified as an access road under the one network road classification (ONRC). Keppell Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Keppell Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 104 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Keppell Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • King Street: 50 km/h (proposed 30 km/h) • Kirk Street: 50 km/h (proposed 30 km/h) • Brisbane Street: 50 km/h (proposed 30 km/h) • Potatau Street: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Keppell Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Keppell Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Kinder Place (Meadowbank)</u>

The speed limit on Kinder Place, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Kinder Place connects to Temple Street to the west and terminates at a cul-de-sac to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Kinder Place is classified as an access road under the one network road classification (ONRC). Kinder Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Kinder Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 150 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Kinder Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Temple Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kinder Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.34 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Kinder Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - King Edward Street (Sandringham)

The speed limit on King Edward Street, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	King Edward Street connects to Dominion Road to the northeast and to Cambourne Road to the southwest. This road provides access to residential properties and is approximately 1.0 km in length.
	King Edward Street is classified as a secondary collector road under the one network road classification (ONRC). King Edward Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for King Edward Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,040 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of King Edward Street has a mean operating speed in the range of <30 km/h.
	Note that King Edward Street has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Dominion Road: 50 km/h Tanekaha Street: 50 km/h (proposed 30km/h) Paice Avenue: 50 km/h (proposed 30km/h) Gribblehirst Road: 50 km/h (proposed 30km/h) Parrish Road: 50 km/h (proposed 30km/h) Cambourne Road: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps King Edward Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.94 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for King Edward Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - King George Avenue (Epsom)

The speed limit on King George Avenue, Epsom has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached. The scope of this review is limited to the section of King George Avenue between Pencarrow Avenue and St Andrews Road.

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	King George Avenue connects to Pencarrow Avenue to the west and St Andrews Road to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	King George Avenue is classified as a arterial road under the one network road classification (ONRC). However the arterial classification reflect the function of the main portion of King George Avenue east of St Andrews Road. The actual use of the section west of St Andrews Road is more consistent with the Primary Collector classification of Pencarrow Avenue. King George Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities along this road. There are no cyclist amenities and no parking is provided.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for King George Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and very wide shoulder (>2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular

Requirement	Comments
	intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"
(g) the number of intersections	From MegaMaps tool:
and property accessways; and	 Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was estimated from MegaMaps as 2,500 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of King George Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are:
	 Pencarrow Avenue: 50 km/h (proposed 30 km/h) St Andrews Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps King George Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Medium
- The Infrastructure Risk Rating Score is 2.42 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for King George Avenue, the actual operating speeds from the MegaMaps tool are: <30 km/h

<u>Speed Limit Review - Kingsford Road (Mount Eden)</u>

The speed limit on Kingsford Road, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Kingsford Road connects to Ellerton Road to the north and to Peary Road to the south. This road provides access to residential properties and is approximately 0.3 km in length.
	Kingsford Road is classified as a primary collector road under the one network road classification (ONRC). Kingsford Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Kingsford Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	From MegaMaps tool: • Intersection density: 10+ intersections per km • Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 728 vehicles per day (vpd).
	This is inconsistent with the primary collector classification under ONRC and suggests the actual function of the road is more in line with secondary collector/local access.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Kingsford Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Ellerton Road: 50 km/h (proposed 30km/h) • Kensington Avenue: 50 km/h (proposed 30km/h) • Marsden Avenue: 50 km/h (proposed 30km/h) • Peary Road: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kingsford Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.08 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 50 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 50km/h as the safe and appropriate speed for Kingsford Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Kitenui Avenue (Mount Albert)</u>

The speed limit on Kitenui Avenue, Mount Albert has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Kitenui Avenue connects to New North Road to the north and to Mount Albert Road to the south. This road provides access to residential properties and is approximately 0.9 km in length.
	Kitenui Avenue is classified as a secondary collector road under the one network road classification (ONRC). Kitenui Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records five crashes between 2016 and 2020. This included three minor and two non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Kitenui Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2,011 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Kitenui Avenue has a mean operating speed in the range of 30 km/h to < 35km/h.
	Note that Kitenui Avenue has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: New North Road: 50 km/h Bennett Street: 50 km/h (proposed 30km/h) Oakfield Avenue: 50 km/h (proposed 30km/h) Alexis Avenue: 50 km/h (proposed 30km/h) Willis Street: 50 km/h (proposed 30km/h) Lloyd Avenue: 50 km/h (proposed 30km/h) Mount Albert Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kitenui Avenue has the following information:

- o Collective Risk band of **Low-Medium**, and a Personal Risk band of **Medium-High**.
- The Infrastructure Risk Rating Score is 2.21 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Kitenui Avenue, the actual operating speed from the MegaMaps tool is: 34 km/h.

Speed Limit Review - Kiwitea Street (Sandringham)

The speed limit on Kiwitea Street, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached. The scope of this review is limited to the section of Kiwitea Street between Calgary Street and Lambeth Road.

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Kiwitea Street connects to Calgary Street to the north and Lambeth Road to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Kiwitea Street is classified as a secondary collector road under the one network road classification (ONRC). Kiwitea Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020 This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Kiwitea Street were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: Medium lane (3.0 to 3.5 m) and very narrow shoulder (<0.5m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,841 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Kiwitea Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are:
	 Calgary Street: 50 km/h (proposed 30 km/h) Lambeth Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kiwitea Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.30 For urban areas this corresponds to an IRR band of **Medium**.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Kiwitea Street, the actual operating speeds from the MegaMaps tool are: <30 km/h

<u>Speed Limit Review – Koa Street (Meadowbank)</u>

The speed limit on Koa Street, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Koa Street connects to Tahapa Crescent to the north and terminates at a cul-de-sac to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Koa Street is classified as an access road under the one network road classification (ONRC). Koa Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Koa Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 321 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Koa Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Tahapa Crescent: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Koa Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.32 For urban areas this corresponds to an IRR band of **Medium**.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Koa Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Korako Drive (Kumeu)

The speed limit on Korako Drive, Kumeu, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Korako Drive connects to Gilbransen Road to the west and to Eric Farley Drive to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Korako Drive is classified as an access road under the one network road classification (ONRC). Korako Drive is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Korako Drive were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was estimated from MegaMaps as 250 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Korako Drive has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Gilbransen Road: 50km/h (proposed 30km/h) • Fred White Drive: 50km/h (proposed 30km/h) • Kuawa Drive: 50km/h (proposed 30km/h) • Aporo Drive: 50km/h (proposed 30km/h) • Eric Farley Drive: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Korako Drive has the following information:

- $\circ\quad$ Collective Risk band of $\boldsymbol{\text{Low}},$ and a Personal Risk band of $\boldsymbol{\text{Low}}.$
- The Infrastructure Risk Rating Score is 2.75 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Korako Drive, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Kuawa Drive (Kumeu)

The speed limit on Kuawa Drive, Kumeu, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Kuawa Drive connects to Korako Drive to the north and to Van Rixel Drive to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Kuawa Drive is classified as an access road under the one network road classification (ONRC). Kuawa Drive is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Kuawa Drive were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was estimated from MegaMaps as 250 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Kuawa Drive has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Korako Drive: 50km/h (proposed 30km/h)
	Van Rixel Drive: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Kuawa Drive has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.75 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Kuawa Drive, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Lancing Road (Sandringham)

The speed limit on Lancing Road, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Lancing Road connects to Goring Road to the east and to Sandringham Road to the west. This road provides access to residential properties and is approximately 0.4 km in length.
	Lancing Road is classified as an access road under the one network road classification (ONRC). Lancing Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Lancing Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	From MegaMaps tool: • Intersection density: 5 to <10 intersections per km • Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 625 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Lancing Road has a mean operating speed in the range of <30 km/h.
	Note that Lancing Road has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are:
	 Goring Road: 50 km/h (proposed 30km/h) Ngapawa Street: 50 km/h (proposed 30km/h) Sandringham Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Lancing Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.90 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Lancing Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Lewis Younie Road (Kumeu)</u>

The speed limit on Lewis Younie Road, Kumeu, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Lewis Younie Road connects to Gilbransen Road to the east and to McIndoe Road to the west. This road provides access to residential properties and is approximately 0.2 km in length.
	Lewis Younie Road is classified as an access road under the one network road classification (ONRC). Lewis Younie Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all
	road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Lewis Younie Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was estimated from MegaMaps as 250 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Lewis Younie Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Gilbransen Road: 50km/h (proposed 30km/h) Walter Ruddock Avenue: 50km/h (proposed 30km/h) Fred White Drive: 50km/h (proposed 30km/h) Cutfield Lane: 50km/h (proposed 30km/h) McIndoe Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Lewis Younie Road has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.75 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Lewis Younie Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Lidcombe Place (Avondale)</u>

The speed limit on Lidcombe Place, Avondale has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Lidcombe Place connects to Malroy Place to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Lidcombe Place is classified as an access road under the one network road classification (ONRC). Lidcombe Place is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Lidcombe Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 200 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Lidcombe Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Eastdale Road: 50 km/h (proposed 30 km/h) • Lidcombe Place: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Lidcombe Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium**.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Lidcombe Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Lloyd Avenue (Mount Albert)

The speed limit on Lloyd Avenue, Mount Albert has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Lloyd Avenue connects to New North Road to the northwest and to Alberton Avenue to the southeast. This road provides access to residential properties and is approximately 0.6 km in length.
	Lloyd Avenue is classified as a secondary collector road under the one network road classification (ONRC). Lloyd Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Lloyd Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 763 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Lloyd Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: New North Road: 50 km/h Allendale Road: 50 km/h (proposed 30km/h) Ranleigh Road: 50 km/h (proposed 30km/h) Kitenui Avenue: 50 km/h (proposed 30km/h) Alberton Avenue: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Lloyd Avenue has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Lloyd Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Lockyer Road (Kumeu)

The speed limit on Lockyer Road, Kumeu, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Lockyer Road connects to Gilbransen Road to the east and to McIndoe Road to the west. This road provides access to residential properties and is approximately 0.3 km in length.
	Lockyer Road is classified as an access road under the one network road classification (ONRC). Lockyer Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Lockyer Road were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Curved • Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was estimated from MegaMaps as 50 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Lockyer Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Gilbransen Road: 50km/h (proposed 30km/h) McIndoe Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Lockyer Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.41 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Lockyer Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Longfellow Parade (Glen Eden)</u>

The speed limit on Longfellow Parade, Glen Eden, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Longfellow Parade connects to Paewai Road to the north and terminates at a loop to south. This road provides access to residential properties and is approximately 0.3 km in length.
	Longfellow Parade is classified as a secondary collector road under the one network road classification (ONRC). Longfellow Parade is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Longfellow Parade were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 540 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Longfellow Parade has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Paewai Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Longfellow Parade has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 1.91 For urban areas this corresponds to an IRR band of Low-Medium.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Longfellow Parade, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Lorraine Avenue (Mount Albert)

The speed limit on Lorraine Avenue, Mount Albert, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Lorraine Avenue connects to Owairaka Avenue to the north and terminates at a cul-de-sac to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Lorraine Avenue is classified as an access road under the one network road classification (ONRC). Lorraine Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Lorraine Avenue were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 260 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Lorraine Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Owairaka Avenue: 50km/h Delphine Close: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Lorraine Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Lorraine Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Lucia Glade (Meadowbank)</u>

The speed limit on Lucia Glade, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Lucia Glade connects to Temple Street to the east and terminates at a cul-de-sac to the west. This road provides access to residential properties and is approximately 0.2 km in length.
	Lucia Glade is classified as an access road under the one network road classification (ONRC). Lucia Glade is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Lucia Glade were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 100 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Lucia Glade has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Temple Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Lucia Glade has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.41 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Lucia Glade, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Macpherson Street (Meadowbank)</u>

The speed limit on Macpherson Street, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Macpherson Street connects to Bonnie Brae Road to the east and terminates at a cul-de-sac to the northwest. This road provides access to residential properties and is approximately 0.3 km in length.
	Macpherson Street is classified as an access road under the one network road classification (ONRC). Macpherson Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Macpherson Street were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Curved • Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist

Requirement	Comments
	activity are also likely to be present, particularly at certain times of the day"
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 250 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Macpherson Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Bonnie Brae Road: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Macpherson Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.17 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Macpherson Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Madden Avenue (Kumeu)</u>

The speed limit on Madden Avenue, Kumeu, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Madden Avenue connects to Gilbransen Road to the east and to McIndoe Road to the west. This road provides access to residential properties and is approximately 0.3 km in length.
	Madden Avenue is classified as an access road under the one network road classification (ONRC). Madden Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Madden Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was estimated from MegaMaps as 250 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Madden Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Gilbransen Road: 50km/h (proposed 30km/h) • Walter Ruddock Avenue: 50km/h (proposed 30km/h) • Cutfield Lane: 50km/h (proposed 30km/h) • McIndoe Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Madden Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.75 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Madden Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Malory Street (Avondale)

The speed limit on Malory Street, Avondale has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Malory Street connects to Lidcombe Place to the north and Eastdale Road to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Malory Street is classified as an access road under the one network road classification (ONRC). Malory Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Malory Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 200 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Malory Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Eastdale Road: 50 km/h (proposed 30 km/h) • Lidcombe Place: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Malory Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium**.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Malory Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Mamaku Street (Meadowbank)</u>

The speed limit on Mamaku Street, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Mamaku Street connects to Tahapa Crescent to the south and terminates at a loop to the north. This road provides access to residential properties and is approximately 0.2 km in length.
	Mamaku Street is classified as an access road under the one network road classification (ONRC). Mamaku Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Mamaku Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 321 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Mamaku Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Tahapa Crescent: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Mamaku Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.32 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Mamaku Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Manapau Street (Meadowbank)</u>

The speed limit on Manapau Street, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Manapau Street connects to Purewa Road to the north and to Meadowbank Road to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Manapau Street is classified as a secondary collector road under the one network road classification (ONRC). Manapau Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Manapau Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 939 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Manapau Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Purewa Road: 50 km/h (proposed 30km/h) • Tahapa Crescent: 50 km/h (proposed 30km/h) • Meadowbank Road: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Manapau Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.90 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Manapau Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Manse Road (Pahurehure)

The speed limit on Manse Road, Pahurehure, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Manse Road connects to Great South Road to the east and terminates at a cul-de-sac to the west. This road provides access to residential properties and is approximately 0.5 km in length.
	Manse Road is classified as an access road under the one network road classification (ONRC). Manse Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Manse Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to<5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 639 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Manse Road has a mean operating speed in the range of <30 km/h.
	Note that Manse Road has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Great South Road: 50km/h Argyle Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Manse Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.91 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Manse Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Mara Street (Meadowbank)</u>

The speed limit on Mara Street, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments	
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.	
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.	
(c) the function and use of the road; and	Mara Street connects to Tahapa Crescent to the south and terminates at a cul-de-sac to the north. This road provides access to residential properties and is approximately 0.1 km in length.	
	Mara Street is classified as an access road under the one network road classification (ONRC). Mara Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.	
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.	
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.	
(e) the characteristics of the road and roadsides; and	The following characteristics for Mara Street were determined using MegaMaps tool.	
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate 	
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"	

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 321 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Mara Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Tahapa Crescent: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Mara Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.32 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Mara Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Margot Street (Epsom)

Margot Street, Epsom, is divided into two sections as outlined below:

Section 1: Margot Street between Great south Road and Clyde Street

Section 2: Margot Street between Clyde Street and Warborough Avenue

The speed limit on Margot Street, Epsom has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Margot Street connects to Great South Road to the north and to Clyde Street to the south. This road provides access to commercial properties and is approximately 0.3 km in length. Margot Street connects to Clyde Street to the north and to Warborough Avenue to the south. This road provides access to residential properties and is approximately 0.5 km in length.
	Margot Street is classified as a secondary collector road under the one network road classification (ONRC). Margot Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Margot Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m)

Requirement	Comments	
	Roadside hazards (in Moderate	both directions): Severe and
(f) adjacent land use; and	The adjacent land use is classified as Commercial Big Box/industrial using MegaMaps tool. The IRR defines Commercial Big Box/industrial as "Large (big box) shops and/or industry/factories with intermittent large accessways and intersections leading to large car parking areas. Regular intersections and smaller accesses are also likely to be present. Some pedestrian and cyclist activity may be present."	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"
(g) the number of intersections and property accessways; and	From MegaMaps tool: • Intersection density: 5 to <10 intersections per km Access density: 5 to <10 accesses per km	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2,600 vehicles per day (vpd).	Average daily traffic (ADT) was determined from MegaMaps as 1,768 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modification	ns at this time.
(j) the views of interested persons and groups.	adjacent to urban schools.	implement 30km/h speed limits general support for implementing
	30km/h speed limits around urbar	schools.
		esidents shows 78% support for ols, kindergartens and community

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Margot Street has a mean operating speed in the range of <30 km/h.

	Note that Margot Street has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	 The existing speed limits on adjoining roads are: Great South Road: 50 km/h Clyde Street: 50 km/h (proposed 30km/h) Mount St John Avenue: 50km/h (proposed 30km/h) Warborough Avenue: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Margot Street has the following information:

Section 1,

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.24 For urban areas this corresponds to an IRR band of **Medium**.

Section 2,

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.21 For urban areas this corresponds to an IRR band of Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

For section 1, the safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 50 km/h.

For section 2, the safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 50km/h and 40km/h as the safe and appropriate speeds for the two sections of Margot Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Mariana Place (Glen Eden)

The speed limit on Mariana Place, Glen Eden, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments	
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.	
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.	
(c) the function and use of the road; and	Mariana Place connects to Paewai Road to the east and terminates at a cul-de-sac to west. This road provides access to residential properties and is approximately 0.1 km in length.	
	Mariana Place is classified as a secondary collector road under the one network road classification (ONRC). Mariana Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.	
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.	
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.	
(e) the characteristics of the road and roadsides; and	The following characteristics for Mariana Place were determined using MegaMaps tool.	
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate 	
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"	

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 150 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Mariana Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Paewai Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Mariana Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Mariana Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Marlowe Road (Blockhouse Bay)

The speed limit on Marlowe Road, Blockhouse Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments	
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.	
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.	
(c) the function and use of the road; and	Marlowe Road connects to Keats Place to the south and Addison Street to the north. This road provides access to residential properties and is approximately 0.2 km in length.	
	Marlowe Road is classified as an access road under the one network road classification (ONRC). Marlowe Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.	
(d) crash risk for all road users; and	rs; NZTA's Crash Analysis System (CAS) records zero crashe between 2016 and 2020.	
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.	
(e) the characteristics of the road and roadsides; and	The following characteristics for Marlowe Road were determined using MegaMaps tool.	
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1 m) Roadside hazards (in both directions): Severe and Moderate 	
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"	

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 250 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Marlowe Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Keats Place: 50 km/h (proposed 30 km/h) • Addison Street: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Marlowe Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.06 For urban areas this corresponds to an IRR band of **Medium**.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Marlowe Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Mars Avenue (Sandringham)

The speed limit on Mars Avenue, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Mars Avenue connects to Sandringham Road to the west and Arabi Street to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Mars Avenue is classified as an access road under the one network road classification (ONRC). Mars Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Mars Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Narrow lane (<3.0m) and very narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 416 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Mars Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Sandringham Road: variable school zone 40 kmh/50 km/h • Arabi Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Mars Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.20 For urban areas this corresponds to an IRR band of **Medium**.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Mars Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Marsden Avenue (Mount Eden)</u>

The speed limit on Marsden Avenue, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Marsden Avenue connects to Dominion Road to the west and to Mount Eden Road to the east. This road provides access to residential properties and is approximately 1.1 km in length.
	Marsden Avenue is classified as a secondary collector road under the one network road classification (ONRC). Marsden Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020. These were three non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Marsden Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,248 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Marsden Avenue has a mean operating speed in the range of 30 km/h to <35 km/h.
	Note that Marsden Avenue has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Dominion Road: 50 km/h Kingsford Road: 50 km/h (proposed 30km/h) Thorley Street: 50 km/h (proposed 30km/h) Mount Eden Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Marsden Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.70 For urban areas this corresponds to an IRR band of **Low-Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Marsden Avenue, the actual operating speed from the MegaMaps tool is: 34 km/h.

Speed Limit Review - Matama Road (Glen Eden)

The speed limit on Matama Road, Glen Eden, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Matama Road connects to Glengarry Road to the northwest and terminates at a cul-de-sac to the southeast. This road provides access to residential properties and is approximately 0.3 km in length.
	Matama Road is classified as an access road under the one network road classification (ONRC). Matama Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Matama Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to <3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 147 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Matama Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Glengarry Road: 50km/h • Shah Place: 50km/h (proposed 30km/h) • Nandana Drive: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Matama Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.32 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Matama Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Matipo Street (Mount Eden)

The speed limit on Matipo Street, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Matipo Street connects to Balmoral Road to the north and to Kensington Avenue to the south. This road provides access to residential properties and is approximately 0.4 km in length.
	Matipo Street is classified as a primary collector road under the one network road classification (ONRC). Matipo Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were one minor injury crash and one non-injury crash
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Matipo Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 3,120 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to		
Current speed limit	The existing speed limit is 50 km/h.	
MegaMaps Mean Operating Speed (km/h)	This section of Matipo Street has a mean operating speed in the range of <30 km/h.	
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Balmoral Road: 50 km/h Rocklands Avenue: 50 km/h (proposed 30km/h) Wairiki Road: 50 km/h (proposed 30km/h) Halston Road: 50 km/h (proposed 30km/h) Thames Street: 50 km/h (proposed 30km/h) Kensington Avenue: 50 km/h (proposed 30km/h)	

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Matipo Street has the following information:

- o Collective Risk band of **Low-Medium**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.22 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 50 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 50km/h as the safe and appropriate speed for Matipo Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Maunsell Road (Parnell)

The speed limit on Maunsell Road, Parnell, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments	
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero 	
	Refer to the Process Summary for further information.	
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.	
(c) the function and use of the road; and	Maunsell Road connects to Parnell Road to the southeast and the internal roads within the Auckland Domain to the northwest. This road provides access to a mix of residential properties, commercial properties and the Auckland Domain and is approximately 0.3 km in length.	
	Maunsell Road is classified as an secondary collector road under the one network road classification (ONRC). Maunsell Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.	
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were one minor injury crash and one non-injury crash.	
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.	
(e) the characteristics of the road and roadsides; and	The following characteristics for Maunsell Road were determined using MegaMaps tool.	
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to <3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate 	
(f) adjacent land use; and	The adjacent land use is classified as Commercial Big Box/industrial using MegaMaps tool. The IRR defines Commercial Big Box/industrial as "Large (big box) shops and/or industry/factories with intermittent large accessways and intersections leading to large car parking areas. Regular	

Requirement	Comments	
	intersections and smaller accesses are also likely to be present. Some pedestrian and cyclist activity may be present."	
(g) the number of intersections and property accessways; and	From MegaMaps tool: • Intersection density: 5 to <10 intersections per km • Access density: 5 to <10 accesses per km	
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 520 vehicles per day (vpd).	
(i) any planned modification to the road; and	There are no planned modifications at this time.	
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.	
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.	
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".	

Table 2: Additional Relevant Factors

AT also had regard to		
Current speed limit	The existing speed limit is 50 km/h.	
MegaMaps Mean Operating Speed (km/h)	This section of Maunsell Road has a mean operating speed in the range of <30 km/h.	
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Parnell Road: 50km/h Titoki Street: 50km/h (proposed 30km/h)	

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Maunsell Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium**,
- The Infrastructure Risk Rating Score is 1.83 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 50 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 50km/h as the safe and appropriate speed for Maunsell Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - McGehan Close (Mount Albert)

The speed limit on McGehan Close, Mount Albert, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments	
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.	
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.	
(c) the function and use of the road; and	McGehan Close connects to Triton Avenue to the east and terminates at a hammerhead to the west. This road provides access to residential properties and is approximately 0.1 km in length.	
	McGehan Close is classified as an access road under the one network road classification (ONRC). McGehan Close is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.	
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data	
	includes crashes for all road users and therefore crash risk for all road users were considered.	
(e) the characteristics of the road and roadsides; and	The following characteristics for McGehan Close were determined using MegaMaps tool.	
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate 	
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"	

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 208 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to		
Current speed limit	The existing speed limit is 50 km/h.	
MegaMaps Mean Operating Speed (km/h)	This section of McGehan Close has a mean operating speed in the range of <30 km/h.	
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Triton Avenue: 50km/h (proposed 30km/h)	

Step 2: Determine the road safety metrics and IRR score

From MegaMaps McGehan Close has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for McGehan Close, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - McIndoe Road (Kumeu)</u>

The speed limit on McIndoe Road, Kumeu, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments	
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information. 	
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.	
(c) the function and use of the road; and	McIndoe Road connects to Matua Road to the north and to Lockyer Road to the south. This road provides access to residential properties and is approximately 0.3 km in length.	
	McIndoe Road is classified as an access road under the one network road classification (ONRC). McIndoe Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.	
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.	
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.	
(e) the characteristics of the road and roadsides; and	The following characteristics for McIndoe Road were determined using MegaMaps tool.	
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate 	
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"	

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was estimated from MegaMaps as 250 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to		
Current speed limit	The existing speed limit is 50 km/h.	
MegaMaps Mean Operating Speed (km/h)	This section of McIndoe Road has a mean operating speed in the range of <30 km/h.	
Speed limits on adjoining roads	 The existing speed limits on adjoining roads are: Matua Road: 50km/h Lewis Younie Road: 50km/h (proposed 30km/h) Madden Avenue: 50km/h (proposed 30km/h) Lockyer Road: 50km/h (proposed 30km/h) 	

Step 2: Determine the road safety metrics and IRR score

From MegaMaps McIndoe Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.75 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for McIndoe Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Meadowbank Road (Meadowbank)

Meadowbank Road, Meadowbank, is divided into two sections as outlined below:

Section 1: Meadowbank Road between Remuera Road and Bonnie Brae Road

Section 2: Meadowbank Road between Bonnie Brae Road and north western end of Meadowbank Road.

The speed limit on Meadowbank Road, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments	
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.	
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.	
(c) the function and use of the road; and	Meadowbank Road connects to Remuera Road to the south and terminates at a cul-de-sac to the northwest. This road provides access to residential properties and is approximately 1.3 km in length.	
	Section 1:	Section 2:
	Meadowbank Road is classified as a primary collector road under the one network road classification (ONRC). Meadowbank Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.	Meadowbank Road is classified as a secondary collector road under the one network road classification (ONRC). Meadowbank Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records six crashes between 2016 and 2020. There were one minor injury crash and five non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all	
	road users were considered.	

Requirement	Comments	
(e) the characteristics of the road and roadsides; and	The following characteristics for Meadowbank Road were determined using MegaMaps tool.	
	 Road stereotype: Two lane undivided Road alignment: Winding Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate 	
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"	
(g) the number of intersections and property accessways; and	From MegaMaps tool: • Intersection density: 5 to <10 intersections per km • Access density: 20+ accesses per km	
(h) traffic volume; and	Section 1: Section 2:	
	Average daily traffic (ADT) was determined from MegaMaps as 3,861 vehicles per day (vpd).	Average daily traffic (ADT) was determined from MegaMaps as 1,766 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.	
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.	
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.	
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".	

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	Meadowbank Road has a mean operating speed in the range of 30 km/h to <35 km/h.
	Note that Meadowbank Road has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are:
	Remuera Road: 50 km/h

 Mount Carmel Place: 50 km/h (proposed 30km/h) Corinth Street: 50 km/h (proposed 30km/h) Bonnie Brae Road: 50 km/h (proposed 30km/h)\ Harapaki Road: 50 km/h (proposed 30km/h)
 Harapaki Road: 50 km/h (proposed 30km/h) Tahapa Crescent: 50 km/h (proposed 30km/h) Manapau Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Meadowbank Road has the following information:

- o Collective Risk band of **Low-Medium**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.59 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h for both sections.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Meadowbank Road, the actual operating speed from the MegaMaps tool is: 32 km/h for section 1 and 33km/h for section 2.

Speed Limit Review - Meredith Street (Blockhouse Bay)

The speed limit on Meredith Street, Blockhouse Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Meredith Street connects to Congreve Place and Chaucer Place to the north and Taylor Street to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Meredith Street is classified as an access road under the one network road classification (ONRC). Meredith Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Meredith Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Narrow lane (<3.0m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 312 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Meredith Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Congreve Place: 50 km/h (proposed 30 km/h) Chaucer Place: 50 km/h (proposed 30 km/h) Swinburne Street: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Meredith Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.2 for urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Meredith Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Meyrick Place (Meadowbank)</u>

The speed limit on Meyrick Place, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Meyrick Place connects to Fancourt Street to the east and terminates at a cul-de-sac to the west. This road provides access to residential properties and is approximately 0.1 km in length.
	Meyrick Place is classified as an access road under the one network road classification (ONRC). Meyrick Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Meyrick Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 535 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Meyrick Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Fancourt Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Meyrick Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.41 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Meyrick Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Moira Street (Grey Lynn)

The speed limit on Moira Street, Grey Lynn, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Moira Street connects to Tawariki Street to the west and terminates at the entrance to St Pauls College to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Moira Street is classified as an access road under the one network road classification (ONRC). Moira Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Moira Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to <3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 208 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Moira Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Tawariki Street: 50km/h (proposed 30km/h) Mokau Street: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Moira Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 1.90 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Moira Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Mokau Street (Grey Lynn)</u>

The speed limit on Mokau Street, Grey Lynn, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Mokau Street connects to Richmond Road to the south and to Moira Street to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Mokau Street is classified as an access road under the one network road classification (ONRC). Mokau Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Mokau Street were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to <3.5m) and wide shoulder (1.0m to <2.0m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 208 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Mokau Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Richmond Road: 50km/h Moira Street: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Mokau Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 1.90 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Mokau Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Monmouth Street (Grey Lynn)</u>

The speed limit on Monmouth Street, Grey Lynn has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Monmouth Street connects to Kirk Street to the west and Burns Street to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Monmouth Street is classified as an access road under the one network road classification (ONRC). Monmouth Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Monmouth Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 104 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Monmouth Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Kirk Street: 50 km/h (proposed 30 km/h) • Waima Street: 50 km/h (proposed 30 km/h) • Burns Street: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Monmouth Street has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Monmouth Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Morgan Street (Newmarket)

The speed limit on Morgan Street, Newmarket, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Morgan Street connects to George Street to the north and to Carlton Gore Road to the south. This road provides access to commercial properties and is approximately 0.2 km in length.
	Morgan Street is classified as a secondary collector road under the one network road classification (ONRC). Morgan Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Morgan Street were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to <3.5m) and wide shoulder (1.0m to <2.0m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Commercial Big Box/industrial using MegaMaps tool. The IRR defines Commercial Big Box/industrial as "Large (big box) shops and/or industry/factories with intermittent large accessways and intersections leading to large car parking areas. Regular intersections and smaller accesses are also likely to be present. Some pedestrian and cyclist activity may be present."

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 5 to <10 accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 520 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Morgan Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Carlton Gore Road: 50km/h George Street: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Morgan Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 1.94 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 50 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 50km/h as the safe and appropriate speed for Morgan Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Mount Carmel Place (Meadowbank)</u>

The speed limit on Mount Carmel Place, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Mount Carmel Place connects to Meadowbank Road to the west and terminates at a cul-de-sac to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Mount Carmel Place is classified as an access road under the one network road classification (ONRC). Mount Carmel Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Mount Carmel Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 200 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Mount Carmel Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Meadowbank Road: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Mount Carmel Place has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Mount Carmel Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Mount St John Avenue (Epsom)

The speed limit on Mount St John Avenue, Epsom has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Mount St John Avenue connects to Manukau Road to the west and to Market Road to the east. This road provides access to residential properties and is approximately 0.8 km in length.
	Mount St John Avenue is classified as a primary collector road under the one network road classification (ONRC). Mount St John Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020. These were one minor injury and two non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Mount St John Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist

Requirement	Comments
	activity are also likely to be present, particularly at certain times of the day"
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 3,120 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Mount St John Avenue has a mean operating speed in the range of 30 km/h to <35 km/h.
	Note that Mount St John Avenue has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Manukau Road: 50 km/h • Margot Street: 50 km/h (proposed 30km/h) • Belvedere Street: 50 km/h (proposed 30km/h) • Market Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Mount St John Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 1.81 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 50 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 50km/h as the safe and appropriate speed for Mount St John Avenue, the actual operating speed from the MegaMaps tool is: approximately 31 km/h.

Speed Limit Review - Nandana Drive (Glen Eden)

The speed limit on Nandana Drive, Glen Eden, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Nandana Drive connects to Matama Road to the west and to Glengarry Road to the east. This road provides access to residential properties and is approximately 0.5 km in length.
	Nandana Drive is classified as a primary collector road under the one network road classification (ONRC). Nandana Drive is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities. While megamaps records this road as a primary collector, actual
	road usage is more consistent with a secondary collector.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Nandana Drive were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to <3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist

Requirement	Comments
	activity are also likely to be present, particularly at certain times of the day"
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 776 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Nandana Drive has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Glengarry Road: 50km/h • Surat Place: 50km/h (proposed 30km/h) • Kashmir Road: 50km/h (proposed 30km/h) • Tagor Street: 50km/h (proposed 30km/h) • Matama Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Nandana Drive has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.06 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Nandana Drive, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Ngaire Avenue (Epsom)</u>

The speed limit on Ngaire Avenue, Epsom has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Ngaire Avenue connects to Great South Road to the north and to Clyde Street to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Ngaire Avenue is classified as a secondary collector road under the one network road classification (ONRC). Ngaire Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Ngaire Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Commercial Big Box/industrial using MegaMaps tool. The IRR defines Commercial Big Box/industrial as "Large (big box) shops and/or industry/factories with intermittent large accessways and intersections leading to large car parking areas. Regular

Requirement	Comments
	intersections and smaller accesses are also likely to be present. Some pedestrian and cyclist activity may be present."
(g) the number of intersections and property accessways; and	From MegaMaps tool: • Intersection density: 10+ intersections per km • Access density: 5 to <10+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,040 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Ngaire Avenue has a mean operating speed in the range of <30 km/h.
	Note that Ngaire Avenue has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Great South Road: 50 km/h Clyde Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Ngaire Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.53 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Ngaire Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Ngapawa Street (Sandringham)

The speed limit on Ngapawa Street, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Ngapawa Street connects to Lancing Road to the south and terminates at a cul-de-sac to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Ngapawa Street is classified as an access road under the one network road classification (ONRC). Ngapawa Street is a two-way, two-lane, undivided road. There are pedestrian amenities along this road. There are no cyclist amenities. The roadway is too narrow to accommodate on street parking.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Ngapawa Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist

Requirement	Comments
	activity are also likely to be present, particularly at certain times of the day"
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 625 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Ngapawa Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Lancing Road: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Ngapawa Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.90 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Ngapawa Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Niger Street (Grey Lynn)</u>

The speed limit on Niger Street, Grey Lynn has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Niger Street connects to King Street to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Niger Street is classified as an access road under the one network road classification (ONRC). Niger Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Niger Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: <1 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 100 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Niger Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • King Street: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Niger Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.74 For urban areas this corresponds to an IRR band of Low Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Niger Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Norana Avenue (Remuera)</u>

The speed limit on Norana Avenue, Remuera has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Norana Avenue connects to Remuera Road to the north and Armadale Road to the west. This road provides access to residential properties and is approximately 0.4 km in length.
	Norana Avenue is classified as an access road under the one network road classification (ONRC). Norana Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a minor injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Norana Avenue were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 624 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Norana Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Remuera Road: 50km/h Armadale Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Norana Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 1.79 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Norana Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Oakfield Avenue (Mount Albert)

The speed limit on Oakfield Avenue, Mount Albert has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Oakfield Avenue connects to Kitenui Avenue to the northwest and terminates at a dead end to the southeast. This road provides access to residential properties and is approximately 0.1 km in length.
	Oakfield Avenue is classified as an access road under the one network road classification (ONRC). Oakfield Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Oakfield Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 150 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Oakfield Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Kitenui Avenue: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Oakfield Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.08 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Oakfield Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review -</u> O'Donnell Avenue (Wesley)

The speed limit on O'Donnell Avenue, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	O'Donnell Avenue connects to Richardson Road to the west and to Sandringham Road to the east. This road provides access to residential properties and is approximately 1.2 km in length.
	O'Donnell Avenue is classified as a primary collector road under the one network road classification (ONRC). O'Donnell Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records eleven crashes between 2016 and 2020. These were one serious injury crash, two minor injury crashes and eight non-injury crashes.
	This resulted in one Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for O'Donnell Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: curved Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 3,838 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of O'Donnell Avenue has a mean operating speed in the range of 30 km/h to <35 km/h. Note that O'Donnell Avenue has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Richardson Road: 50km/h Parkinson Avenue: 50km/h (proposed 30km/h) Fletcher Street: 50km/h (proposed 30km/h) Wainwright Avenue: 50km/h (proposed 30km/h) Farrelly Avenue: 50km/h (proposed 30km/h) Buccaneer Street: 50km/h (proposed 30km/h) Beagle Avenue: 50km/h (proposed 30km/h) Potter Avenue: 50km/h (proposed 30km/h) Holdsworth Avenue: 50km/h (proposed 30km/h) Sandringham Road: 50km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps O'Donnell Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low-Medium**.
- The Infrastructure Risk Rating Score is 2.46 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for O'Donnell Avenue, the actual operating speed from the MegaMaps tool is: 32 km/h.

Speed Limit Review - Oxton Road (Sandringham)

The speed limit on Oxton Road, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Oxton Road connects to Sandringham Road to the west and Pine Street to the east. This road provides access to residential properties and is approximately 0.5 km in length.
	Oxton Road is classified as a secondary collector road under the one network road classification (ONRC). Oxton Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Oxton Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,040 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Oxton Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Sandringham Road: variable school zone 40 kmh/50 km/h • Arabi Street: 50 km/h (proposed 30km/h) • Pine St: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Oxton Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.30 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Oxton Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Paewai Road (Glen Eden)

The speed limit on Paewai Road, Glen Eden, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Paewai Road connects to Withers Road to the north and terminates at a dead end to west. This road provides access to residential properties and is approximately 0.5 km in length.
	Paewai Road is classified as a secondary collector road under the one network road classification (ONRC). Paewai Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Paewai Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 901 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Paewai Road has a mean operating speed in the range of <30 km/h.
	Note that Paewai Road has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Withers Road: 50km/h (proposed 30km/h) • Mariana Place: 50km/h (proposed 30km/h) • Wirihana Road: 50km/h (proposed 30km/h) • Longfellow Parade: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Paewai Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Paewai Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Paice Avenue (Sandringham)

The speed limit on Paice Avenue, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Paice Avenue connects to Dominion Road to the east and to Sandringham Road to the west. This road provides access to residential properties and is approximately 0.8 km in length.
	Paice Avenue is classified as a secondary collector road under the one network road classification (ONRC). Paice Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020. These were three non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Paice Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 971 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Paice Avenue has a mean operating speed in the range of <30 km/h.
	Note that Paice Avenue has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Dominion Road: 50 km/h Tanekaha Street: 50 km/h (proposed 30km/h) King Edward Street: 50 km/h (proposed 30km/h) Sandringham Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Paice Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.79 For urban areas this corresponds to an IRR band of **Low-Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Paice Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Parawai Crescent (Ponsonby)</u>

The speed limit on Parawai Crescent, Ponsonby, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Parawai Crescent connects to Richmond Road to the south and to Hukanui Crescent to the north. This road provides access to residential properties and is approximately 0.3 km in length.
	Parawai Crescent is classified as an arterial road under the one network road classification (ONRC). Parawai Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
	Note that Parawai Crescent is classed as arterial due to the high volume of traffic using the road, however the design and operating speed of the road is more consistent with a secondary collector function.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were one minor injury crash and one non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Parawai Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to <3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated"

Requirement	Comments
	by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"
(g) the number of intersections	From MegaMaps tool:
and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 7,132 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Parawai Crescent has a mean operating speed in the range of <30 km/h.
	Note that Parawai Crescent has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Richmond Road: 50km/h Tawariki Street: 50km/h (proposed 30km/h) Hukanui Crescent: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Parawai Crescent has the following information:

- o Collective Risk band of Low-Medium, and a Personal Risk band of Medium,
- The Infrastructure Risk Rating Score is 2.24 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 50 km/h

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 50km/h as the safe and appropriate speed for Parawai Crescent, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Parkinson Avenue (Wesley)

The speed limit on Parkinson Avenue, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Parkinson Avenue connects to Potter Avenue to the east and to O'Donnell Avenue to the west. This road provides access to residential properties and is approximately 0.6 km in length.
	Parkinson Avenue is classified as an access road under the one network road classification (ONRC). Parkinson Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a minor injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Parkinson Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 750 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Parkinson Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: O'Donnell Avenue: 50km/h (proposed 30km/h) Farrelly Avenue: 50km/h (proposed 30km/h) Belcher Street: 50km/h (proposed 30km/h) Potter Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Parkinson Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Parkinson Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Parrish Road (Sandringham)

The speed limit on Parrish Road, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Parrish Road connects to St Albans Avenue to the east and to Sandringham Road to the west. This road provides access to residential properties and is approximately 0.5 km in length.
	Parrish Road is classified as a secondary collector road under the one network road classification (ONRC). Parrish Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Parrish Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,248 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Parrish Road has a mean operating speed in the range of <30 km/h.
	Note that Parrish Road has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are:
	 St Albans Avenue: 50 km/h (proposed 30km/h) King Edward Street: 50 km/h (proposed 30km/h) Sandringham Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Parrish Road has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.30 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Parrish Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Parsons Road (Meadowbank)

The speed limit on Parsons Road, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Parsons Road connects to Fancourt Street to the west and to Gowing Drive to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Parsons Road is classified as a secondary collector road under the one network road classification (ONRC). Parsons Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Parsons Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,248 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Parsons Road has a mean operating speed in the range of 30 km/h to <35 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Fancourt Street: 50 km/h (proposed 30km/h) • Gowing Drive: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Parsons Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.33 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Parsons Road, the actual operating speed from the MegaMaps tool is: 30 km/h.

Speed Limit Review - Patterson Street (Sandringham)

The speed limit on Patterson Street, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Patterson Street connects to Sandringham Road to the west and Arabi Street to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Patterson Street is classified as an Access road under the one network road classification (ONRC). Patterson Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Patterson Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and wide shoulder (1.0m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 728 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Patterson Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Sandringham Road: variable school zone 40 kmh/50 km/h • Arabi Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Patterson Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.90 For urban areas this corresponds to an IRR band of Low-Medium.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Patterson Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Peary Road (Mount Eden)

The speed limit on Peary Road, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Peary Road connects to Dominion Road to the west and to Mount Eden Road to the east. This road provides access to residential properties and is approximately 1.2 km in length.
	Peary Road is classified as a secondary collector road under the one network road classification (ONRC). Peary Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020. These were three non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Peary Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,040 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Peary Road has a mean operating speed in the range of <30 km/h.
	Note that Peary Road has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Dominion Road: 50 km/h Kingsford Road: 50 km/h (proposed 30km/h) Bathurst Road: 50 km/h (proposed 30km/h) Mount Eden Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Peary Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.95 For urban areas this corresponds to an IRR band of **Low-Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Peary Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Pencarrow Avenue (Epsom)

The speed limit on Pencarrow Avenue, Epsom has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Pencarrow Avenue connects to Mount Eden Road to the west and St Andrews Road to the east. This road provides access to residential properties and is approximately 0.6 km in length.
	Pencarrow Avenue is classified as a Primary Collector road under the one network road classification (ONRC). Pencarrow Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020
	This was a non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Pencarrow Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and very wide shoulder (> 2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 4,160 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Pencarrow Avenue has a mean operating speed in the range of 30-34 km/h.
	Note that Pencarrow Avenue has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Mount Eden Road: 50 km/h • St Andrews Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Pencarrow Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.22 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 50 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 50km/h as the safe and appropriate speed for Pencarrow Avenue, the actual operating speed from the MegaMaps tool is: 32 km/h.

Speed Limit Review - Penrhyn Road (Epsom)

The speed limit on Penrhyn Road, Epsom has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Penrhyn Road connects to Pencarrow Avenue to the north and St Andrews Road to the east. This road provides access to residential properties and is approximately 0.6 km in length.
	Penrhyn Road is classified as a Secondary Collector road under the one network road classification (ONRC). Penrhyn Road is a twoway, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Penrhyn Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and very wide shoulder (> 2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,040 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Penrhyn Road has a mean operating speed in the range of <30 km/h.
	Note that Penrhyn Road has an existing traffic calming device and that the impact of this is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Pencarrow Avenue: 50 km/h (proposed 30km/h) • Balmoral Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Penrhyn Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.94 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Penrhyn Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Pine Street (Mount Eden)</u>

The speed limit on Pine Street, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Pine Street connects to Balmoral Road to the north and to Halesowen Avenue to the south. This road provides access to residential properties and is approximately 0.6 km in length.
	Pine Street is classified as a secondary collector road under the one network road classification (ONRC). Pine Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Pine Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,872 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Pine Street has a mean operating speed in the range of <30 km/h.
	Note that Pine Street has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Balmoral Road: 50 km/h Wiremu Street: 50 km/h (proposed 30km/h) Oxton Rd: 50 km/h (proposed 30km/h) Tennyson Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Pine Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.94 For urban areas this corresponds to an IRR band of **Low-Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Pine Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Pitcher Place (Glen Eden)</u>

The speed limit on Pitcher Place, Glen Eden, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Pitcher Place connects to Annison Avenue Road to the south and terminates at a cul-de-sac to north. This road provides access to residential properties and is approximately 0.1 km in length.
	Pitcher Place is classified as an access road under the one network road classification (ONRC). Pitcher Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Pitcher Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 201 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Pitcher Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Annison Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Pitcher Place has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Pitcher Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Plane Street (Avondale)

The speed limit on Plane Street, Avondale has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Plane Street connects to Victor Street to the south and Beatrix Street to the north. This road provides access to residential properties and is approximately 0.2 km in length.
	Plane Street is classified as an access road under the one network road classification (ONRC). Plane Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Plane Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 549 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Plane Street has a mean operating speed in the range of 30-34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Beatrix Street: 50 km/h (proposed 30 km/h) Victor Street: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Plane Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.15. For urban areas this corresponds to an IRR band of **Medium**.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Plane Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Platina Street (Remuera)

The speed limit on Platina Street, Remuera has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Platina Street connects to Omahu Road to the northwest and Lillington Road to the south. This road provides access to residential properties and is approximately 0.4 km in length.
	Platina Street is classified as an access road under the one network road classification (ONRC). Platina Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Platina Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 312 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Platina Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Lillington Road: 50km/h • Omahu Road: 50km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Platina Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.79 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Platina Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Plunket Road (Mount Eden)</u>

The speed limit on Plunket Road, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Plunket Road connects to Bank Street to the west and to Mount Eden Road to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Plunket Road is classified as an access road under the one network road classification (ONRC). Plunket Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Plunket Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 263 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Plunket Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Bank Street: 50 km/h (proposed 30km/h) Mount Eden Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Plunket Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.79 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Plunket Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Poronui Street (Mount Eden)</u>

The speed limit on Poronui Street, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Poronui Street is classified as a secondary collector road under the one network road classification (ONRC). Poronui Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
	Poronui Street connects to Mount Eden Road to the west and terminates at a cul-de-sac adjacent to the grounds of Auckland Normal Intermediate to the east. This road provides access to residential properties and the school. It is approximately 0.3 km in length.
(d) crash risk for all road users; and	From NZTA's MegaMaps tool there is a total of 2 recorded crashes: one minor and one non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Poronui Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and very wide shoulder (>2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 From MegaMaps tool: Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 893 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	Poronui Street has a mean operating speed in the range of <30km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Mount Eden Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Poronui Street has the following information:

- o Collective Risk band of Low-Medium, and a Personal Risk band of Medium
- The Infrastructure Risk Rating Score is 1.55 For urban areas this corresponds to an IRR band of Low

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit = 50km/h

Proposed safe and appropriate speed limit recommendation = 30 km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Poronui Street, the actual operating speeds from the megamaps tool are: < 30km/h

<u>Speed Limit Review - Potatau Street (Grey Lynn)</u>

The speed limit on Potatau Street, Grey Lynn has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Potatau Street connects to Keppell Street to the south and Great North Road to the North. This road provides access to residential properties and is approximately 0.2 km in length.
	Potatau Street is classified as an access road under the one network road classification (ONRC). Potatau Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Potatau Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 104 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Potatau Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Great North Road: 50 km/h • Dean Street: 50 km/h (proposed 30 km/h) • Home Street: 50 km/h (proposed 30 km/h) • Keppell Street: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Potatau Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Potatau Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Potter Avenue (Wesley)</u>

The speed limit on Potter Avenue, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Potter Avenue connects to Farrelly Avenue to the south and to O'Donnell Avenue to the north. This road provides access to residential properties and is approximately 0.6 km in length.
	Potter Avenue is classified as an access road under the one network road classification (ONRC). Potter Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020. These were three non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Potter Avenue were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 750 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Potter Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Farrelly Avenue: 50km/h (proposed 30km/h) • Holdsworth Avenue: 50km/h (proposed 30km/h) • Hedley Road: 50km/h (proposed 30km/h) • Parkinson Avenue: 50km/h (proposed 30km/h) • O'Donnell Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Potter Avenue has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Potter Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Purewa Road (Meadowbank)

The speed limit on Purewa Road, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Purewa Road connects to Manapau Street to the southeast and terminates at a dead end to the northwest. This road provides access to residential properties and is approximately 0.2 km in length.
	Purewa Road is classified as an access road under the one network road classification (ONRC). Purewa Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Purewa Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 2 to <3 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 78 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Purewa Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Manapau Street: 50 km/h (proposed 30km/h) Puroto Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Purewa Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.47 For urban areas this corresponds to an IRR band of Low.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Purewa Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Puroto Street (Meadowbank)</u>

The speed limit on Puroto Street, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Puroto Street connects to Purewa Road to the north and terminates at a cul-de-sac to the south. This road provides access to residential properties and is approximately 0.1 km in length.
	Puroto Street is classified as an access road under the one network road classification (ONRC). Puroto Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Puroto Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 2 to <3 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 78 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Puroto Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Purewa Road: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Puroto Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.47 For urban areas this corresponds to an IRR band of Low.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Puroto Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Putiki Street (Grey Lynn)</u>

The speed limit on Putiki Street, Grey Lynn has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Putiki Street connects to Kirk Street to the west and Burns Street to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Putiki Street is classified as a secondary collector road under the one network road classification (ONRC). Putiki Street is a one-way, one-lane, divided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Putiki Street were determined using MegaMaps tool.
	 Road stereotype: Divided – non-traversable OR One way Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Commercial Big Box/Industrial using MegaMaps tool. The IRR defines Commercial Big Box/Industrial as "intermittent large accessways and intersections leading to large car parking areas. Regular intersections and smaller accesses are also likely to be present. Some pedestrian and cyclist activity may be present".

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 5 to <10 accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 832 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Putiki Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Kirk Street: 50 km/h (proposed 30 km/h) • Waima Street: 50 km/h (proposed 30 km/h) • Burns Street: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Putiki Street has the following information:

- o Collective Risk band of **Low Medium**, and a Personal Risk band of **Medium**
- The Infrastructure Risk Rating Score is 1.54 For urban areas this corresponds to an IRR band of Low.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Putiki Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Queens Avenue (Mount Eden)

The speed limit on Queens Avenue, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Queens Avenue connects to Dominion Road to the west and to Matipo Street to the east. This road provides access to residential properties and is approximately 0.4 km in length.
	Queens Avenue is classified as an access road under the one network road classification (ONRC). Queens Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records five crashes between 2016 and 2020. These were five non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Queens Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 608 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Queens Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Dominion Road: 50 km/h Matipo Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Queens Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.90 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Queens Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Ranleigh Road (Mount Albert)

The speed limit on Ranleigh Road, Mount Albert has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Ranleigh Road connects to Lloyd Avenue to the northeast and to Mount Albert Road to the southwest. This road provides access to residential properties and is approximately 0.2 km in length.
	Ranleigh Road is classified as an access road under the one network road classification (ONRC). Ranleigh Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Ranleigh Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 763 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Ranleigh Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Lloyd Avenue: 50 km/h (proposed 30km/h) Mount Albert Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Ranleigh Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Ranleigh Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Rembrandt Place (Opaheke)

The speed limit on Rembrandt Place, Opaheke, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Rembrandt Place connects to Tasman Drive to the north and terminates at a cul-de-sac to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Rembrandt Place is classified as an access road under the one network road classification (ONRC). Rembrandt Place is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020. This resulted in zero Death and Serious Injury (DSI). This data
	includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Rembrandt Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 490 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Rembrandt Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Tasman Drive: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Rembrandt Place has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.82 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Rembrandt Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Rocklands Avenue (Mount Eden)

The speed limit on Rocklands Avenue, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Rocklands Avenue connects to Dominion Road to the west and to Matipo Street to the east. This road provides access to residential properties and is approximately 0.4 km in length.
	Rocklands Avenue is classified as a secondary collector road under the one network road classification (ONRC). Rocklands Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records seven crashes between 2016 and 2020. These were seven non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Rocklands Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,352 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Rocklands Avenue has a mean operating speed in the range of <30 km/h.
	Note that Rocklands Avenue has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Dominion Road: 50 km/h • Matipo Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Rocklands Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.94 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Rocklands Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Ruapehu Street (Mount Eden)

The speed limit on Ruapehu Street, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Ruapehu Street connects to Balmoral Road to the north and to Wairiki Road to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Ruapehu Street is classified as an access road under the one network road classification (ONRC). Ruapehu Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Ruapehu Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 728 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Ruapehu Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Balmoral Road: 50 km/h • Douglas Road: 50 km/h (proposed 30km/h) • Wairiki Road: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Ruapehu Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.79 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Ruapehu Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Seascape Road (Remuera)

The speed limit on Seascape Road, Remuera has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Seascape Road connects to Waiatarua Road to the west and terminates at a loop to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Seascape Road is classified as an access road under the one network road classification (ONRC). Seascape Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Seascape Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 509 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Seascape Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Waiatarua Road: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Seascape Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.66 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Seascape Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Shackleton Road (Mount Eden)

The speed limit on Shackleton Road, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero
	Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Shackleton Road connects to Dominion Road to the west and to Mount Eden Road to the east. This road provides access to residential properties and is approximately 1.1 km in length.
	Shackleton Road is classified as a secondary collector road under the one network road classification (ONRC). Shackleton Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020. These were one minor injury and two non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Shackleton Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,456 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Shackleton Road has a mean operating speed in the range of 30 km/h to <35km/h.
	Note that Shackleton Road has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Dominion Road: 50 km/h Waitomo Avenue: 50 km/h (proposed 30km/h) Whitworth Road: 50 km/h (proposed 30km/h) Bathurst Road: 50 km/h (proposed 30km/h) Mount Eden Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Shackleton Road has the following information:

- o Collective Risk band of Low-Medium, and a Personal Risk band of Medium.
- The Infrastructure Risk Rating Score is 1.7 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Shackleton Road, the actual operating speed from the MegaMaps tool is: 31 km/h.

Speed Limit Review - Shah Place (Glen Eden)

The speed limit on Shah Place, Glen Eden, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Shah Place connects to Matama Road to the northeast and terminates at a dead end to the southwest. This road provides access to residential properties and is approximately 0.1 km in length.
	Shah Place is classified as an access road under the one network road classification (ONRC). Shah Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Shah Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to <3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 147 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Shah Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Matama Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Shah Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.32 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Shah Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Shearer Street (Wesley)

The speed limit on Shearer Street, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Shearer Street connects to Hedley Road to the southeast and terminates at a cul-de-sac to the northwest. This road provides access to residential properties and is approximately 0.1 km in length.
	Shearer Street is classified as an access road under the one network road classification (ONRC). Shearer Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Shearer Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 750 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Shearer Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Hedley Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Shearer Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Shearer Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Sheppard Avenue (Wesley)

The speed limit on Sheppard Avenue, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Sheppard Avenue connects to Aurora Avenue to the northwest and to Sandringham Road to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Sheppard Avenue is classified as an access road under the one network road classification (ONRC). Sheppard Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Sheppard Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 498 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Sheppard Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Sandringham Road: 50km/h Aurora Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Sheppard Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Sheppard Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Short Street (Papakura)

The speed limit on Short Street, Papakura, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Short Street connects to Opaheke Road to the west and terminates at a cul-de-sac to the east. This road provides access to residential properties and is approximately 0.4 km in length.
	Short Street is classified as a secondary collector road under the one network road classification (ONRC). Short Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Short Street were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1.393 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Short Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Opaheke Road: 50km/h Greenhaven Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Short Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.21 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Short Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Skeates Avenue (Wesley)

The speed limit on Skeates Avenue, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Skeates Avenue connects to Holdsworth Avenue to the north and to Sandringham Road to the southeast. This road provides access to residential properties and is approximately 0.2 km in length.
	Skeates Avenue is classified as an access road under the one network road classification (ONRC). Skeates Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Skeates Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 750 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Skeates Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Holdsworth Avenue: 50km/h (proposed 30km/h) • Galbraith Street: 50km/h (proposed 30km/h) • Sandringham Road: 50km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Skeates Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Skeates Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Sonnenberg Way (Titirangi)

The speed limit on Sonnenberg Way, Titirangi, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Sonnenberg Way connects to Wirihana Road to the west and terminates at a cul-de-sac to east. This road provides access to residential properties and is approximately 0.1 km in length.
	Sonnenberg Way is classified as an access road under the one network road classification (ONRC). Sonnenberg Way is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Sonnenberg Way were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Curved • Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was estimated from MegaMaps as 100 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Sonnenberg Way has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Wirihana Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Sonnenberg Way has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 2.41 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Sonnenberg Way, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - St Albans Avenue (Mount Eden)

The speed limit on St Albans Avenue, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	St Albans Avenue connects to Dominion Road to the east and to Parrish Road to the west. This road provides access to residential properties and is approximately 0.3 km in length.
	St Albans Avenue is classified as a secondary collector road under the one network road classification (ONRC). St Albans Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These included one serious injury and one non-injury crash.
	This resulted in one Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for St Albans Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist

Requirement	Comments
	activity are also likely to be present, particularly at certain times of the day"
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,306 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of St Albans Avenue has a mean operating speed in the range of <30 km/h.
	Note that St Albans Avenue has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Dominion Road: 50 km/h Eldon Road: 50 km/h (proposed 30km/h) Parrish Road: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps St Albans Avenue has the following information:

- Collective Risk band of Low, and a Personal Risk band of Medium.
 The Infrastructure Risk Rating Score is 2.05 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for St Albans Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - St Andrews Road (Epsom)

The speed limit on St Andrews Road, Epsom has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached. The scope of this review is limited to the section of St Andrews Road between King George Avenue and the northern end of St Andrews Road.

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero
	Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	This section of St Andrews Road connects to King George Avenue to the south and terminates at the boundary of a University of Auckland campus to the north. This road provides access to residential properties, an intermediate school and a tertiary campus, and is approximately 0.3 km in length.
	St Andrews Road is classified as a secondary collector road under the one network road classification (ONRC). St Andrews Road is a two-way, two-lane, undivided road. There are pedestrian amenities and parking along this road. There are no cyclist amenities provided.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for St Andrews Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0 to 3.5 m) and wide shoulder (1.0m to <2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist

Requirement	Comments
	activity are also likely to be present, particularly at certain times of the day"
(g) the number of intersections and property accessways; and	From MegaMaps tool: • Intersection density: 5 to <10 intersections per km
	Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was estimated from MegaMaps as 2,000 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of St Andrews Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are:
	 King George Avenue: 50 km/h Disraeli Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps St Andrews Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.24 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for St Andrews Road,

the actual operating speeds from the MegaMaps tool are: <30 km/h

<u>Speed Limit Review - Surat Place (Glen Eden)</u>

The speed limit on Surat Place, Glen Eden, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Surat Place connects to Nandana Drive to the west and terminates at a cul-de-sac to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Surat Place is classified as an access road under the one network road classification (ONRC). Surat Place is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Surat Place were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 141 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Surat Place has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Nandana Drive: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Surat Place has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.41 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Surat Place, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Swinburne Street (Blockhouse Bay)</u>

The speed limit on Swinburne Street, Blockhouse Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Swinburne Street connects to Meredith Street to the east and Falkirk Street to the west. This road provides access to residential properties and is approximately 0.3 km in length.
	Swinburne Street is classified as an access road under the one network road classification (ONRC). Swinburne Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records four crashes between 2016 and 2020. These were non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Swinburne Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Narrow lane (<3.0m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 312 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Swinburne Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Falkirk Street: 50 km/h (proposed 30 km/h) • Meredith Street: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Swinburne Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.2 For urban areas this corresponds to an IRR band of Medium.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Swinburne Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Tagor Street (Glen Eden)</u>

The speed limit on Tagor Street, Glen Eden, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Tagor Street connects to Nandana Drive to the north and to Kashmir Road to the east. This road provides access to residential properties and is approximately 0.2 km in length.
	Tagor Street is classified as an access road under the one network road classification (ONRC). Tagor Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were one minor injury crash and one non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Tagor Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1953 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Tagor Street has a mean operating speed in the range of 30 km/h to <35 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Nandana Drive: 50km/h (proposed 30km/h) Kashmir Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Tagor Street has the following information:

- o Collective Risk band of Low-Medium, and a Personal Risk band of Medium.
- The Infrastructure Risk Rating Score is 2.30 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Tagor Street, the actual operating speed from the MegaMaps tool is: 32 km/h.

Speed Limit Review - Tahapa Crescent (Meadowbank)

The speed limit on Tahapa Crescent, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Tahapa Crescent connects to Manapau Street to the west and to Meadowbank Road to the south. This road provides access to residential properties and is approximately 0.7 km in length.
	Tahapa Crescent is classified as an access road under the one network road classification (ONRC). Tahapa Crescent is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records three crashes between 2016 and 2020. There were one minor injury crash and two non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Tahapa Crescent were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist

Requirement	Comments
	activity are also likely to be present, particularly at certain times of the day"
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 321 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Tahapa Crescent has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Manapau Street: 50 km/h (proposed 30km/h) Kapua Street: 50 km/h (proposed 30km/h) Koa Street: 50 km/h (proposed 30km/h) Mamaku Street: 50 km/h (proposed 30km/h) Mara Street: 50 km/h (proposed 30km/h) Medowbank Road: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Tahapa Crescent has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.32 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Tahapa Crescent, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Tanekaha Street (Mount Eden)

The speed limit on Tanekaha Street, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Tanekaha Street connects to King Edward Street to the north and to Elizabeth Street to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Tanekaha Street is classified as an access road under the one network road classification (ONRC). Tanekaha Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Tanekaha Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	From MegaMaps tool: • Intersection density: 10+ intersections per km • Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 208 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Tanekaha Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • King Edward Street: 50 km/h (proposed 30km/h) • Paice Avenue: 50 km/h (proposed 30km/h) • Elizabeth Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Tanekaha Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.08 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Tanekaha Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Tasman Drive (Opaheke)

The speed limit on Tasman Drive, Opaheke, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Tasman Drive connects to Greenhaven Avenue to the east and to Opaheke Road to the west. This road provides access to residential properties and is approximately 0.4 km in length.
	Tasman Drive is classified as an access road under the one network road classification (ONRC). Tasman Drive is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Tasman Drive were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 490 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Tasman Drive has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Opaheke Road: 50km/h Cotton Place: 50km/h (proposed 30km/h) Rembrandt Place: 50km/h (proposed 30km/h) Greenhaven Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Tasman Drive has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.82 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Tasman Drive, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Tawariki Street (Ponsonby)</u>

The speed limit on Tawariki Street, Ponsonby, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Tawariki Street connects to Parawai Crescent to the west and terminates at a dead end to the east. This road provides access to residential properties and is approximately 0.4 km in length.
	Tawariki Street is classified as an access road under the one network road classification (ONRC). Tawariki Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Tawariki Street were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to <3.5m) and wide shoulder (1.0m to <2.0m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 208 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Tawariki Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Parawai Crescent: 50km/h (proposed 30km/h) • Moira Street: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Tawariki Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 1.90 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Tawariki Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Taylors Road (Mount Albert)

The speed limit on Taylors Road, Mount Albert has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Taylors Road connects to Alberton Avenue to the west and to St Lukes Road to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Taylors Road is classified as a primary collector road under the one network road classification (ONRC). Taylors Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Taylors Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 3,120 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Taylors Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Alberton Avenue: 50 km/h (proposed 30km/h) • St Lukes Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Taylors Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.70 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 50 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 50km/h as the safe and appropriate speed for Taylors Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Telford Avenue (Mount Eden)</u>

The speed limit on Telford Avenue, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Telford Avenue connects to Dominion Road to the east and terminates at the entrance of Good Shepherd School to the west. This road provides access to residential properties and is approximately 0.2 km in length.
	Telford Avenue is classified as a secondary collector road under the one network road classification (ONRC). Telford Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all
	road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Telford Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist

Requirement	Comments
	activity are also likely to be present, particularly at certain times of the day"
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 520 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Telford Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Dominion Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Telford Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.66 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Telford Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Temple Street (Meadowbank)</u>

Temple Street, Meadowbank, is divided into two sections as outlined below:

Section 1: Temple Street between Harapaki Road and Blackett Crescent.

Section 2: Temple Street between Blackett Crescent and St Johns Road.

The speed limit on Temple Street, Meadowbank has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Step 1: Determine the base information

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Paguirament	Comments	
Requirement	Comments	
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transp Management Guide 2016 Infrastructure Risk Rating NZTA MegaMaps tool Auckland Transport Vision Refer to the Process Summary for 	Manual 2016 (IRR) n Zero
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management G consideration of the speed limit.	Guide was used for the review and
(c) the function and use of the road; and		paki Road to the north and to St bad provides access to residential 7 km in length.
	one network road classification (O	econdary collector road under the NRC). Temple Street is a two-way, are pedestrian amenities and onere are no cyclist amenities.
(d) crash risk for all road users; and		n (CAS) records three crashes Vere two minor injury crashes and
		Serious Injury (DSI). This data rs and therefore crash risk for all
(e) the characteristics of the	Section 1:	Section 2:
road and roadsides; and	The following characteristics for Temple Street were determined using MegaMaps tool.	The following characteristics for Temple Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: straight 	 Road stereotype: Two lane undivided Road alignment: Straight

Requirement	Comments	
	Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate	Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	MegaMaps tool. The IRR defines by housing with frequent drivewa intersections and accesses are	ified as Urban Residential using Urban Residential as "dominated ys and on street parking. Regular present. Pedestrian and cyclist ent, particularly at certain times of
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was de vehicles per day (vpd).	etermined from MegaMaps as 871
(i) any planned modification to the road; and	There are no planned modification	ns at this time.
(j) the views of interested persons and groups.	Central government policy is to adjacent to urban schools.	implement 30km/h speed limits
	Key stakeholders have indicated 30km/h speed limits around urban	general support for implementing a schools.
		esidents shows 78% support for ols, kindergartens and community

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	Temple Street has a mean operating speed in the range of: Section 1: 30 km/h to <35km/h. Section 2: <30km/h Note that Temple Street has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are:

 Harapaki Road: 50 km/h (proposed 30km/h) Fancourt Street: 50 km/h (proposed 30km/h) Appleyard Crescent: 50 km/h (proposed 30km/h) Lucia Glade: 50 km/h (proposed 30km/h)\ Blackett Crescent: 50 km/h (proposed 30km/h)
Kinder Place: 50 km/h (proposed 30km/h)St Johns Road: 50km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Temple Street has the following information:

- o Collective Risk band of **Low-Medium**, and a Personal Risk band of **Medium-High**.
- The Infrastructure Risk Rating Score is:
 Section 1: 2.18 For urban areas this corresponds to an IRR band of Medium.
 Section 2: 1.90 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h for both sections.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Temple Street, the actual operating speed from the MegaMaps tool is:

Section 1: 31 km/h

Section 2: <30 km/h

<u>Speed Limit Review - Tennyson Street (Mount Eden)</u>

The speed limit on Tennyson Street, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments	
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.	
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.	
(c) the function and use of the road; and	Tennyson Street connects to Dominion Road to the east and Volcanic Street to the west. This road provides access to residential properties and is approximately 0.3 km in length.	
	Tennyson Street is classified as an access road under the one network road classification (ONRC). Tennyson Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.	
(d) crash risk for all road users; and	; NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.	
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.	
(e) the characteristics of the road and roadsides; and	The following characteristics for Tennyson Street were determined using MegaMaps tool.	
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate 	
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"	

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 936 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Tennyson Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Dominion Road: 50 km/h Volcanic Street: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Tennyson Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.90 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Tennyson Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Thames Street (Mount Eden)

The speed limit on Thames Street, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments	
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.	
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.	
(c) the function and use of the road; and	Thames Street connects to Matipo Street to the west and terminates at a cul-de-sac to the east. This road provides access to residential properties and is approximately 0.2 km in length.	
	Thames Street is classified as an access road under the one network road classification (ONRC). Thames Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.	
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.	
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.	
(e) the characteristics of the road and roadsides; and	The following characteristics for Thames Street were determined using MegaMaps tool.	
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate 	
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"	

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 200 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Thames Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Matipo Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Thames Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 1.79 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Thames Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Thomson Street (Wesley)</u>

The speed limit on Thomson Street, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Thomson Street connects to Aurora Avenue to the south and terminates at a cul-de-sac to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Thomson Street is classified as an access road under the one network road classification (ONRC). Thomson Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020. This resulted in zero Death and Serious Injury (DSI). This data
	includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Thomson Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 498 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Thomson Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Aurora Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Thomson Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Medium**.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Thomson Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Thorley Street (Mount Eden)</u>

The speed limit on Thorley Street, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Thorley Street connects to Marsden Avenue to the south and terminates at a cul-de-sac to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Thorley Street is classified as an access road under the one network road classification (ONRC). Thorley Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Thorley Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 150 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Thorley Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Marsden Avenue: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Thorley Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.18 For urban areas this corresponds to an IRR band of **Medium**.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Thorley Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Titoki Street (Parnell)</u>

The speed limit on Titoki Street, Parnell, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Titoki Street connects to George Street to the south and to Domain Drive to the north. This road provides access to a mix of residential properties, commercial properties and the Auckland Domain and is approximately 0.3 km in length.
	Titoki Street is classified as a primary collector road under the one network road classification (ONRC). Titoki Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records four crashes between 2016 and 2020. These were one serious injury crash and three non-injury crashes.
	This resulted in one Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Titoki Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to <3.5m) and narrow shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Commercial Big Box/industrial using MegaMaps tool. The IRR defines Commercial Big Box/industrial as "Large (big box) shops and/or industry/factories with intermittent large accessways and intersections leading to large car parking areas. Regular

Requirement	Comments
	intersections and smaller accesses are also likely to be present. Some pedestrian and cyclist activity may be present."
(g) the number of intersections and property accessways; and	 Intersection density: 5 to <10 intersections per km Access density: 5 to <10 accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2,600 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Titoki Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Domain Drive: 50km/h Maunsell Road: 50km/h (proposed 30km/h) George Street: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Titoki Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Medium,
- The Infrastructure Risk Rating Score is 2.08 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 50 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 50km/h as the safe and appropriate speed for Titoki Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Tranmere Road (Sandringham)

The speed limit on Tranmere Road, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Tranmere Road connects to Sandringham Road to the west and ends at a cul-de-sac to the east. This road provides access to residential properties and is approximately 0.4 km in length.
	Tranmere Road is classified as a secondary collector road under the one network road classification (ONRC). Tranmere Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Tranmere Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 416 vehicles per day (vpd). This suggests the road has an access function rather than the secondary collector function recorded in megamaps.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Tranmere Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Sandringham Road: 50 km/h • Arabi Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Tranmere Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Tranmere Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Trinity Street (Ponsonby)</u>

The speed limit on Trinity Street, Ponsonby, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Trinity Street connects to Kelmarna Avenue to the west and to Ardmore Road to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Trinity Street is classified as a secondary collector road under the one network road classification (ONRC). Trinity Street is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all
	road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Trinity Street were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to <3.5m) and very wide shoulder (>2.0m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2,403 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Trinity Street has a mean operating speed in the range of <30 km/h.
	Note that Trinity Street has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are:
	 Kelmarna Avenue: 50km/h (proposed 30km/h) Ardmore Road: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Trinity Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 2.22 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Trinity Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Triton Avenue (Wesley)</u>

The speed limit on Triton Avenue, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Triton Avenue connects to Beagle Avenue to the east and to Tyburnia Avenue to the north. This road provides access to residential properties and is approximately 0.3 km in length.
	Triton Avenue is classified as an access road under the one network road classification (ONRC). Triton Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Triton Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 208 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Triton Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Tyburnia Avenue: 50km/h (proposed 30km/h) McGehan Close: 50km/h (proposed 30km/h) Beagle Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Triton Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Triton Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Truro Road (Sandringham)

The speed limit on Truro Road, Sandringham has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Truro Road connects to Goring Road to the east and to Sandringham Road to the west. This road provides access to residential properties and is approximately 0.4 km in length.
	Truro Road is classified as an access road under the one network road classification (ONRC). Truro Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Truro Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 393 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Truro Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Goring Road: 50 km/h (proposed 30km/h) Sandringham Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Truro Road has the following information:

- $\circ\quad$ Collective Risk band of $\boldsymbol{\text{Low}},$ and a Personal Risk band of $\boldsymbol{\text{Low}}.$
- The Infrastructure Risk Rating Score is 2.15 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Truro Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review – Tyburnia Avenue (Wesley)

The speed limit on Tyburnia Avenue, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Tyburnia Avenue connects to Beagle Avenue to the east and to Owiraka Avenue to the northwest. This road provides access to residential properties and is approximately 0.3 km in length.
	Tyburnia Avenue is classified as a secondary collector road under the one network road classification (ONRC). Tyburnia Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Tyburnia Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,456 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Tyburnia Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Owiraka Avenue: 50km/h Triton Avenue: 50km/h (proposed 30km/h) Beagle Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Tyburnia Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.49 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Tyburnia Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Ulster Road (Blockhouse Bay)

The speed limit on Ulster Road, Blockhouse Bay has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Ulster Road connects to Wolverton Street to the north and Busby Street to the south. This road provides access to residential properties and is approximately 0.4 km in length.
	Ulster Road is classified as a secondary collector road under the one network road classification (ONRC). Ulster Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Ulster Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and wide shoulder (1m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1144 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Ulster Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Falkirk Street: 50 km/h (proposed 30 km/h) • Ulster Road: 50 km/h (proposed 30 km/h) • Ulster Road: 50 km/h (proposed 30 km/h) • Taylor Street: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Ulster Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 2.05 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Ulster Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Van Rixel Drive (Kumeu)</u>

The speed limit on Van Rixel Drive, Kumeu, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Van Rixel Drive connects to Gilbransen Road to the west and to Eric Farley Drive to the east. This road provides access to residential properties and is approximately 0.3 km in length.
	Van Rixel Drive is classified as an access road under the one network road classification (ONRC). Van Rixel Drive is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Van Rixel Drive were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was estimated from MegaMaps as 250 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Van Rixel Drive has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Gilbransen Road: 50km/h (proposed 30km/h) • Kuawa Drive: 50km/h (proposed 30km/h) • Aporo Drive: 50km/h (proposed 30km/h) • Eric Farley Drive: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Van Rixel Drive has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.75 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Van Rixel Drive, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Victor Street (Avondale)</u>

The speed limit on Victor Street, Avondale has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Victor Street connects to Rosebank Road to the west and Great North Road to the east. This road provides access to residential properties and is approximately 0.6 km in length.
	Victor Street is classified as a primary collector road under the one network road classification (ONRC). Victor Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records 11 crashes between 2016 and 2020. These were non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Victor Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: Medium lane (3.0m to 3.5m) and wide shoulder (1m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2496 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Victor Street has a mean operating speed in the range of 30-34 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Rosebank Road: 50 km/h Great North Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Victor Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**
- The Infrastructure Risk Rating Score is 2.05. For urban areas this corresponds to an IRR band of **Medium**.

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Victor Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Violet Street (Mount Albert)</u>

The speed limit on Violet Street, Mount Albert has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Violet Street connects to Bennett Street to the northeast and to Alexis Avenue to the southwest. This road provides access to residential properties and is approximately 0.2 km in length.
	Violet Street is classified as an access road under the one network road classification (ONRC). Violet Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Violet Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 156 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Violet Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Bennett Street: 50 km/h (proposed 30km/h) Alexis Avenue: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Violet Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.44 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Violet Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Volcanic Street (Mount Eden)</u>

The speed limit on Volcanic Street, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Volcanic Street connects to Balmoral Road to the north and terminates at the Good Shepherd School entrance to the south. This road provides access to residential properties and is approximately 0.4 km in length.
	Volcanic Street is classified as a secondary collector road under the one network road classification (ONRC). Volcanic Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Volcanic Street were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist

Requirement	Comments
	activity are also likely to be present, particularly at certain times of the day"
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,006 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Volcanic Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Balmoral Road: 50 km/h Wiremu Street: 50 km/h (proposed 30km/h) Tennyson Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Volcanic Street has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.94 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Volcanic Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Waiatarua Road (Remuera)

The speed limit on Waiatarua Road, Remuera has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Waiatarua Road connects to Remuera Road to the south and terminates at a dead end to the north. This road provides access to residential properties and is approximately 0.8 km in length.
	Waiatarua Road is classified as a secondary collector road under the one network road classification (ONRC). Waiatarua Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were two non-injury crashes. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Waiatarua Road were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to 3.5m) and wide shoulder (1.0m to <2.0m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2,090 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Waiatarua Road has a mean operating speed in the range of 30 km/h to <35 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Remuera Road: 50 km/h Keith Avenue:50km/h (proposed 30km/h) Seascape Road:50km/h (proposed 30km/h) Corinth Street:50km/h (proposed 30km/h) Dover Place:50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Waiatarua Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.05 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Waiatarua Road, the actual operating speed from the MegaMaps tool is: 32 km/h.

<u>Speed Limit Review - Wainwright Avenue (Wesley)</u>

The speed limit on Wainwright Avenue, Wesley, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Wainwright Avenue connects to O'Donnell Avenue to the south and terminates at a dead end to the north. This road provides access to residential properties and is approximately 0.1 km in length.
	Wainwright Avenue is classified as an access road under the one network road classification (ONRC). Wainwright Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all
	road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Wainwright Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 104 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Wainwright Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: O'Donnell Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Wainwright Avenue has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.44 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Wainwright Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Wairiki Road (Mount Eden)

The speed limit on Wairiki Road, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Wairiki Road connects to Matipo Street to the west and to Mount Eden Road to the east. This road provides access to residential properties and is approximately 0.7 km in length.
	Wairiki Road is classified as a secondary collector road under the one network road classification (ONRC). Wairiki Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Wairiki Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,560 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Wairiki Road has a mean operating speed in the range of <30 km/h.
	Note that Wairiki Road has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Matipo Street: 50 km/h (proposed 30km/h) Ruapehu Street: 50 km/h (proposed 30km/h) Bank Street: 50 km/h (proposed 30km/h) Mount Eden Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Wairiki Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.94 For urban areas this corresponds to an IRR band of **Low-Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Wairiki Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Waitomo Avenue (Mount Eden)

The speed limit on Waitomo Avenue, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Waitomo Avenue connects to Shackleton Road to the north and to Landscape Road to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Waitomo Avenue is classified as an access road under the one network road classification (ONRC). Waitomo Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Waitomo Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 468 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Waitomo Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Shackleton Road: 50 km/h (proposed 30km/h) • Landscape Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Waitomo Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 1.79 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Waitomo Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Walter Ruddock Avenue (Kumeu)</u>

The speed limit on Walter Ruddock Avenue, Kumeu, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Walter Ruddock Avenue connects to Lewis Younie Road to the north and to Madden Avenue to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Walter Ruddock Avenue is classified as an access road under the one network road classification (ONRC). Walter Ruddock Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Walter Ruddock Avenue were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was estimated from MegaMaps as 250 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Walter Ruddock Avenue has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Lewis Younie Road: 50km/h (proposed 30km/h) • Madden Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Walter Ruddock Avenue has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.75 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Walter Ruddock Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review –</u> Wanganui Avenue (Ponsonby)

The speed limit on Wanganui Avenue, Ponsonby, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Wanganui Avenue connects to Jervois Road to the north and to Trinity Street to the south. This road provides access to residential properties and is approximately 0.6 km in length.
	Wanganui Avenue is classified as an access road under the one network road classification (ONRC). Wanganui Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records two crashes between 2016 and 2020. These were two non-injury crashes This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Wanganui Avenue were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to <3.5m) and very wide shoulder (>2.0m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 748 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Wanganui Avenue has a mean operating speed in the range of <30 km/h.
	Note that Wanganui Avenue has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Jervois Road: 50km/h • Trinity Street: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Wanganui Avenue has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 1.55 For urban areas this corresponds to an IRR band of Low.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Wanganui Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Warborough Avenue (Epsom)</u>

The speed limit on Warborough Avenue, Epsom has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Warborough Avenue connects to Manukau Road to the west and terminates in a cul-de-sac to the east. This road provides access to residential properties and is approximately 0.1 km in length.
	Warborough Avenue is classified as a secondary collector road under the one network road classification (ONRC). Warborough Avenue is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Warborough Avenue were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Straight • Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist

Requirement	Comments
	activity are also likely to be present, particularly at certain times of the day"
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,040 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Warborough Avenue has a mean operating speed in the range of <30 km/h.
	Note that Warborough Avenue has existing traffic calming measures and that the impact of these is reflected in the MegaMaps Mean Operating Speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Manukau Road: 50 km/h • Margot Street: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Warborough Avenue has the following information:

- Collective Risk band of Low, and a Personal Risk band of Low.
- The Infrastructure Risk Rating Score is 2.49 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Warborough Avenue, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Wembley Road (Mount Eden)

The speed limit on Wembley Road, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Wembley Road connects to Dominion Road to the east and terminates at a dead end to the west. This road provides access to residential properties and is approximately 0.4 km in length.
	Wembley Road is classified as an access road under the one network road classification (ONRC). Wembley Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Wembley Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 390 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Wembley Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Highcliffe Road: 50 km/h (proposed 30km/h) • Dominion Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Wembley Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low
- The Infrastructure Risk Rating Score is 1.79 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Wembley Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Wharf Road (Ponsonby)

The speed limit on Wharf Road, Ponsonby, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Wharf Road connects to Jervois Road to the north and terminates at a cul-de-sac to the south. This road provides access to residential properties and is approximately 0.3 km in length.
	Wharf Road is classified as an access road under the one network road classification (ONRC). Wharf Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data
	includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Wharf Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to <3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 110 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Wharf Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Jervois Road: 50km/h • Buller Street: 50km/h (proposed 30km/h) • Cox Street: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Wharf Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 2.06 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Wharf Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Whitworth Road (Mount Eden)

The speed limit on Whitworth Road, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Whitworth Road connects to Shackleton Road to the north and to Landscape Road to the south. This road provides access to residential properties and is approximately 0.2 km in length.
	Whitworth Road is classified as a secondary collector road under the one network road classification (ONRC). Whitworth Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Whitworth Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,144 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Whitworth Road has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Shackleton Road: 50 km/h (proposed 30km/h) • Landscape Road: 50 km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Whitworth Road has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.22 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Whitworth Road, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review - Willis Street (Mount Albert)</u>

The speed limit on Willis Street, Mount Albert has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Willis Street connects to Kitenui Avenue to the northwest and to Alberton Avenue to the southeast. This road provides access to residential properties and is approximately 0.2 km in length.
	Willis Street is classified as an access road under the one network road classification (ONRC). Willis Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records zero crashes between 2016 and 2020.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Willis Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and narrow shoulder (0.5m to <1.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 10+ intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 208 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Willis Street has a mean operating speed in the range of <30 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Kitenui Avenue: 50 km/h (proposed 30km/h) • Alberton Avenue: 50 km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Willis Street has the following information:

- o Collective Risk band of **Low**, and a Personal Risk band of **Low**.
- The Infrastructure Risk Rating Score is 2.34 For urban areas this corresponds to an IRR band of **Medium**.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Willis Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

Speed Limit Review - Windmill Road (Epsom)

The speed limit on Windmill Road, Epsom has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	 New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Windmill Road is classified as a secondary collector road under the one network road classification (ONRC). Windmill Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
	Windmill Road connects to Mount Eden Road to the west and Pencarrow Avenue to the southeast. This road provides access to residential properties and a public recreation facility including netball and tennis courts. It is approximately 0.6 km in length.
(d) crash risk for all road users; and	From NZTA's MegaMaps tool there is a total of 1 recorded crash: This was a serious crash with one casualty. This resulted in one Death or Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Windmill Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Curved Carriageway width: Medium lane (3.0 to 3.5 m) and very wide shoulder (>2.0 m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity is also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,534 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time. Note that traffic calming measures are already present outside the netball courts.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	Windmill Road has a mean operating speed in the range of <30km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are:
	 Mount Eden Road: 50 km/h Pencarrow Avenue: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Windmill Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Medium
- The Infrastructure Risk Rating Score is 2.19 For urban areas this corresponds to an IRR band of **Medium**

<u>Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables</u>

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit = 50km/h

Proposed safe and appropriate speed limit recommendation = 30 km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Windmill Road, the actual operating speeds from the megamaps tool are: < 30km/h

<u>Speed Limit Review - Wiremu Street (Mount Eden)</u>

The speed limit on Wiremu Street, Mount Eden has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Wiremu Street connects to Dominion Road to the east and Pine Street to the west. This road provides access to residential properties and is approximately 0.4 km in length.
	Wiremu Street is classified as a secondary collector road under the one network road classification (ONRC). Wiremu Street is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records four crashes between 2016 and 2020. Two minor injury and two non-injury.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Wiremu Street were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to 3.5m) and very wide shoulder (>2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 1,405 vehicles per day (vpd). This level of traffic volume is consistent with the nature of the road.
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Wiremu Street has a mean operating speed in the range of <30 km/h.
	Note that Wiremu Street has existing traffic calming measures and that the impact of these is reflected in the MegaMaps mean operating speed.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Dominion Road: 50 km/h Volcanic Street: 50 km/h (proposed 30 km/h) Pine Street: 50 km/h (proposed 30 km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Wiremu Street has the following information:

- Collective Risk band of Low-Medium, and a Personal Risk band of Medium-High.
- The Infrastructure Risk Rating Score is 1.94 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Wiremu Street, the actual operating speed from the MegaMaps tool is: <30 km/h.

<u>Speed Limit Review – Wirihana Road (Titirangi)</u>

The speed limit on Wirihana Road, Titirangi, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Wirihana Road connects to Paewai Road to the north and to Konini Road to the east. This road provides access to residential properties and is approximately 0.7 km in length.
	Wirihana Road is classified as a secondary collector road under the one network road classification (ONRC). Wirihana Road is a two-way, two-lane, undivided road. There are pedestrian amenities and on-street parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records one crash between 2016 and 2020. This was a non-injury crash. This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Wirihana Road were determined using MegaMaps tool. • Road stereotype: Two lane undivided • Road alignment: Curved • Carriageway width: medium lane (3.0m to <3.5m) and very narrow shoulder (0m to <0.5m) • Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 5 to <10 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 851 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Wirihana Road has a mean operating speed in the range of 30 km/h to <35 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: Paewai Road: 50km/h (proposed 30km/h) Sonnenberg Way: 50km/h (proposed 30km/h) Kaurimu Rise: 50km/h (proposed 30km/h) Konini Road: 50km/h

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Wirihana Road has the following information:

- o Collective Risk band of Low, and a Personal Risk band of Low,
- The Infrastructure Risk Rating Score is 2.41 For urban areas this corresponds to an IRR band of Medium-High.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Wirihana Road, the actual operating speed from the MegaMaps tool is: 33 km/h.

Speed Limit Review - Withers Road (Glen Eden)

The speed limit on Withers Road, Glen Eden, has been reviewed in accordance with the Land Transport Rule: Setting of Speed Limits 2017 (Setting of Speed Limits Rule). The review process is outlined in the Process Summary document attached

Table 1: Setting of Speed Limits Rule Summary of Relevant Requirements (4.2(2))

Requirement	Comments
(a) the information about speed management developed and maintained by the Agency; and:	New Zealand Transport Agency (NZTA) Speed Management Guide 2016 Infrastructure Risk Rating Manual 2016 (IRR) NZTA MegaMaps tool Auckland Transport Vision Zero Refer to the Process Summary for further information.
(b) any relevant guidance on speed management provided by the Agency; and	The NZTA Speed Management Guide was used for the review and consideration of the speed limit.
(c) the function and use of the road; and	Withers Road connects to Glendale Road to the northeast and terminates at a cul-de-sac to southwest. This road provides access to residential properties and is approximately 0.7 km in length.
	Withers Road is classified as a secondary collector road under the one network road classification (ONRC). Withers Road is a two-way, two-lane, undivided road. There are pedestrian amenities and onstreet parking along this road. There are no cyclist amenities.
(d) crash risk for all road users; and	NZTA's Crash Analysis System (CAS) records four crashes between 2016 and 2020. These were two minor injury crashes and two non-injury crashes.
	This resulted in zero Death and Serious Injury (DSI). This data includes crashes for all road users and therefore crash risk for all road users were considered.
(e) the characteristics of the road and roadsides; and	The following characteristics for Withers Road were determined using MegaMaps tool.
	 Road stereotype: Two lane undivided Road alignment: Straight Carriageway width: medium lane (3.0m to <3.5m) and wide shoulder (1.0m to <2.0m) Roadside hazards (in both directions): Severe and Moderate
(f) adjacent land use; and	The adjacent land use is classified as Urban Residential using MegaMaps tool. The IRR defines Urban Residential as "dominated by housing with frequent driveways and on street parking. Regular intersections and accesses are present. Pedestrian and cyclist activity are also likely to be present, particularly at certain times of the day"

Requirement	Comments
(g) the number of intersections and property accessways; and	Intersection density: 3 to <5 intersections per km Access density: 20+ accesses per km
(h) traffic volume; and	Average daily traffic (ADT) was determined from MegaMaps as 2,288 vehicles per day (vpd).
(i) any planned modification to the road; and	There are no planned modifications at this time.
(j) the views of interested persons and groups.	Central government policy is to implement 30km/h speed limits adjacent to urban schools.
	Key stakeholders have indicated general support for implementing 30km/h speed limits around urban schools.
	A recent survey of Auckland residents shows 78% support for "reduced speed limits near schools, kindergartens and community facilities".

Table 2: Additional Relevant Factors

AT also had regard to	
Current speed limit	The existing speed limit is 50 km/h.
MegaMaps Mean Operating Speed (km/h)	This section of Withers Road has a mean operating speed in the range of 30 km/h to <35 km/h.
Speed limits on adjoining roads	The existing speed limits on adjoining roads are: • Glendale Road: 50km/h • Kaurilands Road: 50km/h • Kashmir Road: 50km/h (proposed 30km/h) • Paewai Road: 50km/h (proposed 30km/h) • Annison Avenue: 50km/h (proposed 30km/h)

Step 2: Determine the road safety metrics and IRR score

From MegaMaps Withers Road has the following information:

- o Collective Risk band of **Low-Medium**, and a Personal Risk band of **Medium-High**.
- The Infrastructure Risk Rating Score is 1.81 For urban areas this corresponds to an IRR band of Low-Medium.

Step 3: Identify the recommended safe and appropriate speed using the speed management guide tables

The safe and appropriate speed recommended by Table 2.1 of the Speed Management Guide is 40 km/h.

Step 4: Conclusion

Existing speed limit: 50km/h

Proposed safe and appropriate speed limit: 30km/h

While the speed management guide suggests 40km/h as the safe and appropriate speed for Withers Road, the actual operating speed from the MegaMaps tool is: 33 km/h.